Public Utilities

FORTNIGHTLY

ADMINISTRATION
BOSTON
UNIVERSITY

Volume 58 No. 10 November 8, 1956

OPERATION OF SURFACE CARRIERS
Part I.
By David I. Mackie

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Power Shortage in the Pacific Northwest
By Ernest R. Abrams

« »

Corporation Policy Goes to School
By Joseph K. Gilbert

« »

The Rôle of the States in the Power Reactor Program

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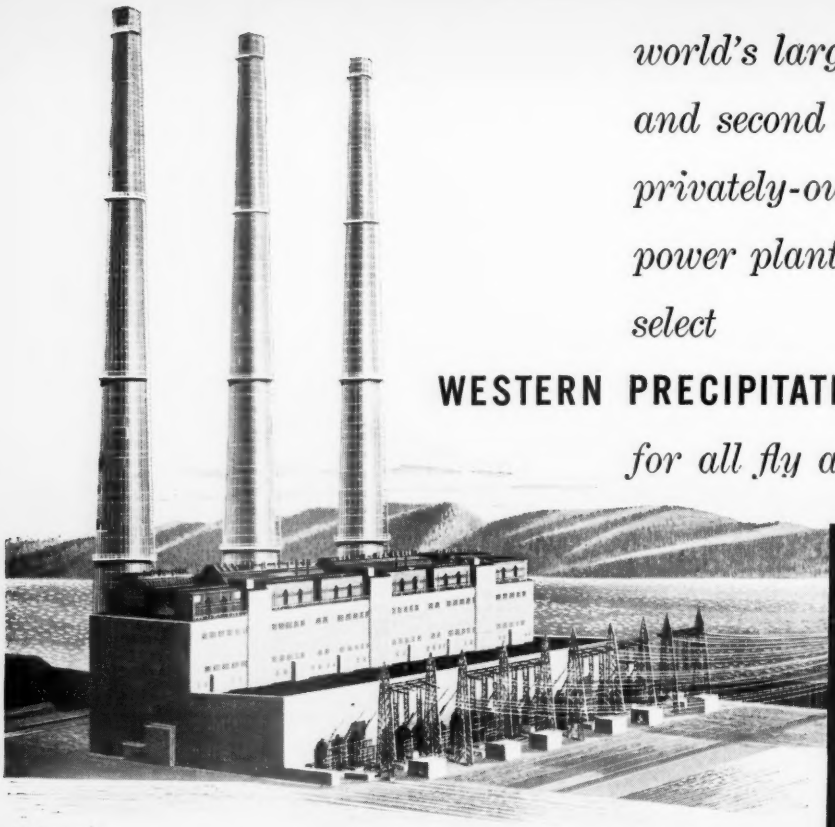

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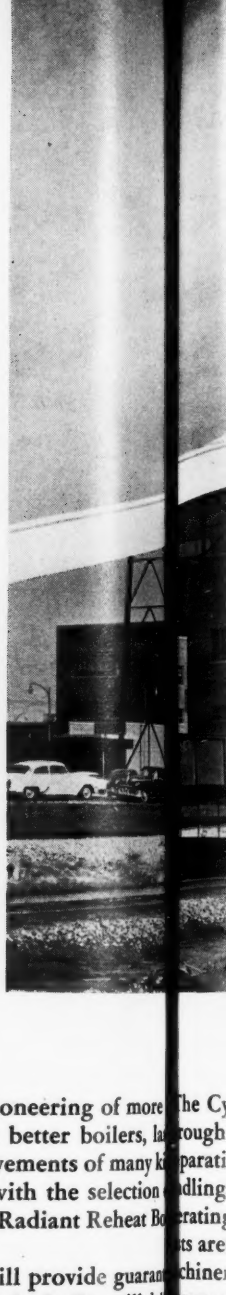

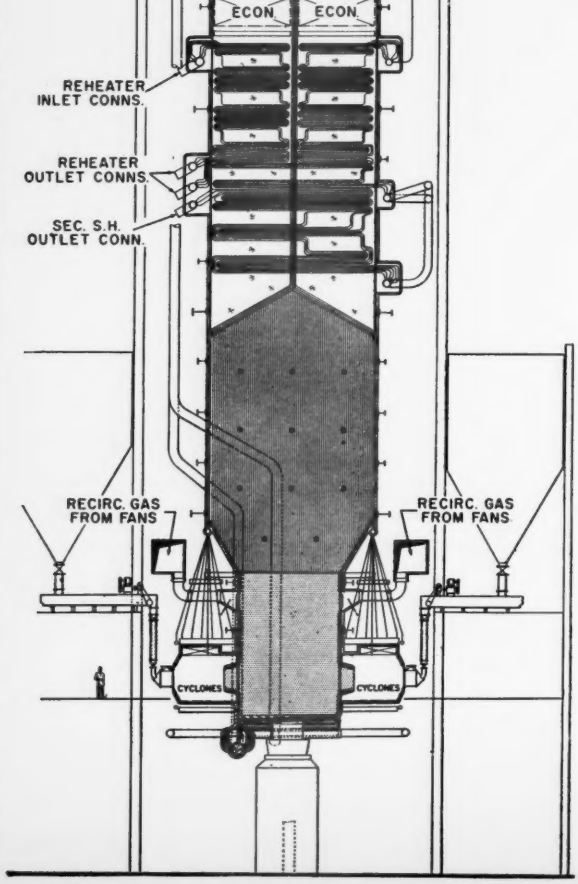

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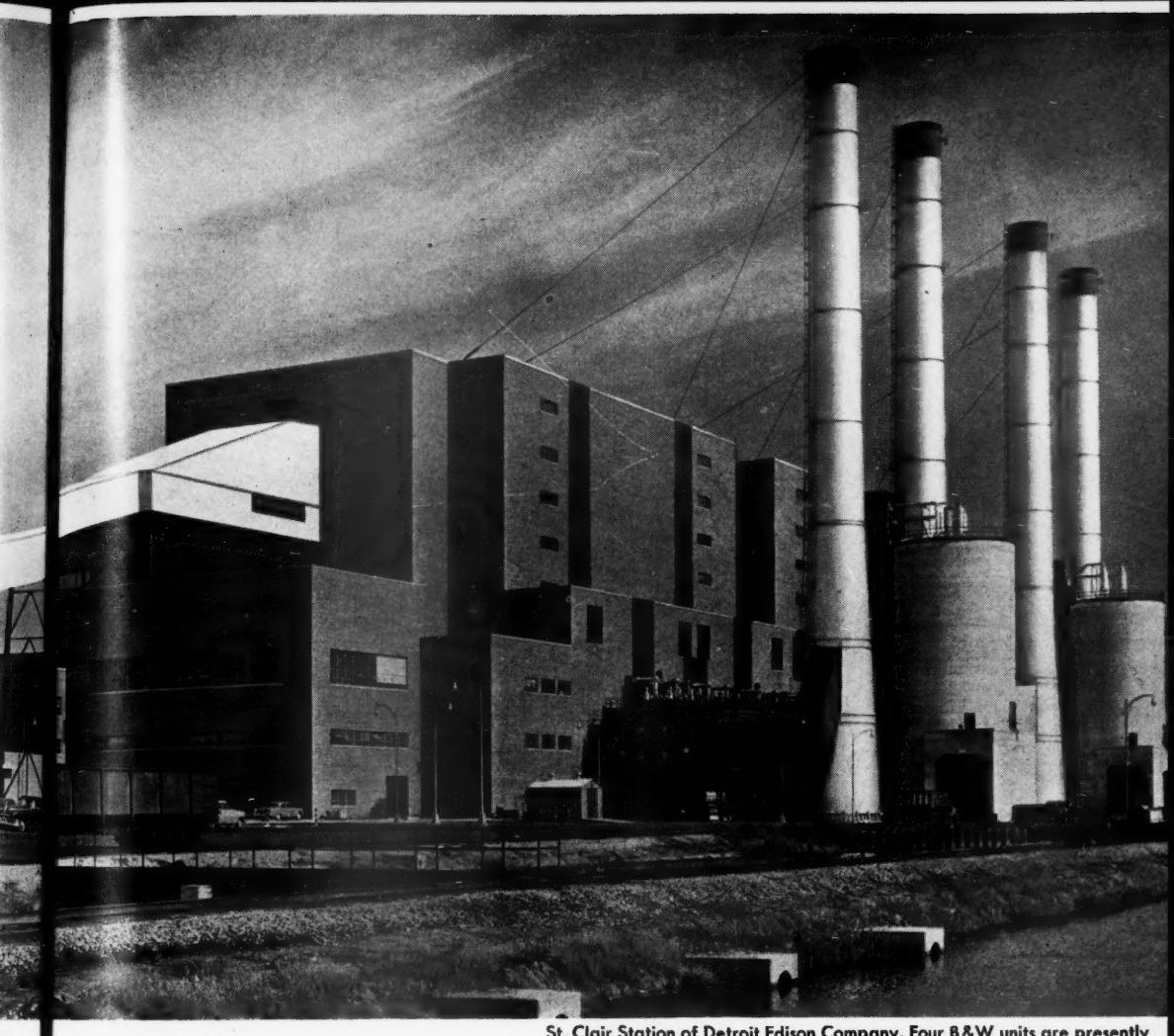

St. Clair Station of Detroit Edison Company. Four B&W units are presently in operation, and a fifth unit—Cyclone Furnace-fired—is now on order.

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he Cyclone Furnace offers many other benefits. rough simplification of the entire process of coal paration, combustion, ash segregation, and ash dling, it makes possible economies in inital cost, erating labor and fuel consumption. Maintenance ts are cut because so much maintenance-causing chinery is eliminated. These are some of the sons why fifty-six boilers of all sizes are now in eration or on order with a total of over 130 clone Furnaces.

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Pages with the Editors

LAST month we noted with interest the appointment of Luther H. Gulick of New York by the National Capital Planning Commission, to direct a mass transportation study for the transit and transportation needs of the metropolitan area of the city of Washington. Since Gulick is nationally known as an expert on public administration, rather than transportation *per se,* we checked a little further into this intricate situation.

WE found that the modern over-all problem of transit and transportation involves far more than industrial know-how and industrial programing. In fact, we were astonished at the multiplicity of various interests and equities involved in this increasingly complex situation — the planning of economic and efficient transit and transport on either a national or local basis.

IN addition to rail and motor carrier interests, we have shippers and passengers, taxicabs, property owners, school authorities, community organizations, city government officials, and, of course, regulatory authorities. Obviously, this situation calls for profound and clear thinking as well as the application of over-all administrative experience.

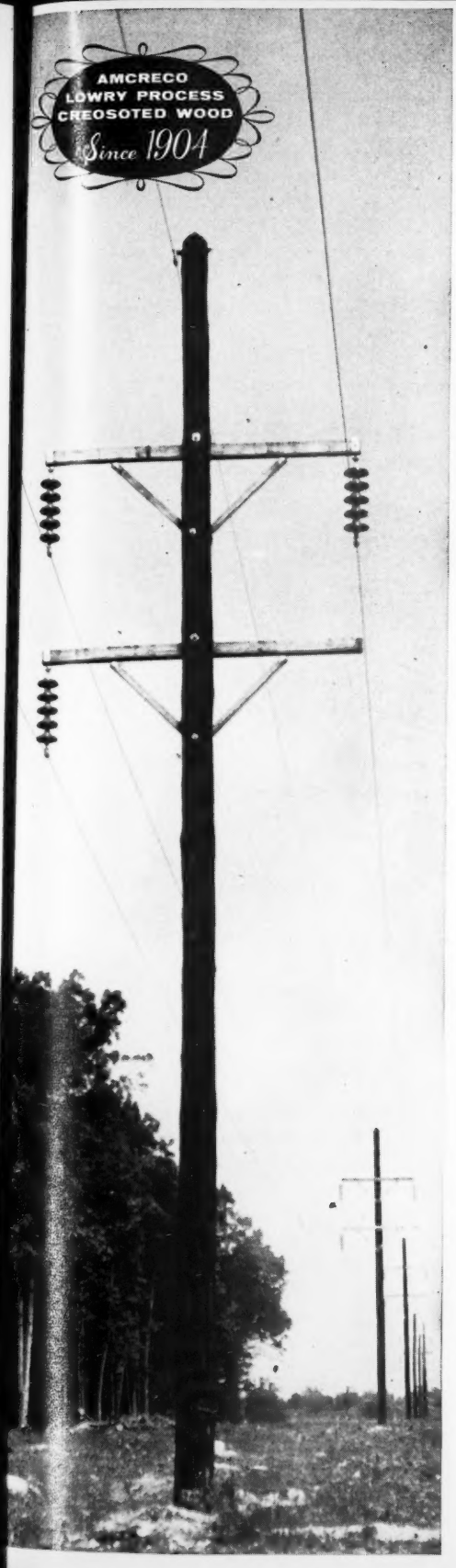
JOSEPH K. GILBERT

DAVID I. MACKIE

EVEN the age-old controversy between rail and motor carrier interests has developed new complications and side effects in recent years. The motor carriers themselves have developed into three distinct groups — public carriers, private carriers, and contract carriers. Each has his own characteristic form of operation. Each has an economic pattern which largely governs the degree of competition, fair or unfair, which their operations impose on other carriers, and especially the railroads.

BEGINNING in this issue we are able to present in two instalments a most comprehensive and well-documented analysis of the regulatory and other problems posed by operators of common, contract, and private carrier service over highways. This author is especially qualified for this important task. He is DAVID I. MACKIE of New York, chairman of the Eastern Railroad Presidents Conference.

MR. MACKIE'S two-part article was originally delivered as a paper before the Section of Public Utility Law of the American Bar Association at its convention in Dallas, Texas, on August 28th. (The other papers delivered at the Dallas convention before the Section of Public Utility Law (with one exception, still to be



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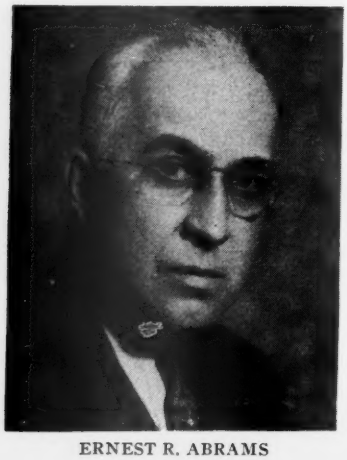
published) were previously reproduced in a special appendix to be found in our September 27, 1956, issue.)

MR. MACKIE is a native of New York city. He was educated at Groton School, Williams College (AB, '26), and Harvard Law School (LLB, '29). Following his admission to the New York bar, he practiced law in New York city until 1945 when he was made general solicitor of the Delaware, Lackawanna & Western Railroad. He later became vice president and general counsel of that railroad, as well as an officer and director of subsidiary companies. He became chairman of the Eastern Railroad Presidents Conference in 1953, and has been exceedingly active in the professional group activities of railroad associations in general.

* * * *

COMMERCIAL electric companies in the Pacific Northwest area have the know-how, the credit, and the continuity of management to carry out a long-range program of power development to provide for their future needs. They have demonstrated through operation of the Northwest Power Pool that they can work in harmony with each other and with government power agencies. But this requires permission from both state and federal governments. Beginning on page 753, ERNEST R. ABRAMS, economist and author of business articles of New York city, has outlined the purpose of the power company plans to end the power shortage in the Pacific Northwest.



ERNEST R. ABRAMS

BEGINNING on page 760, JOSEPH K. GILBERT, of the Seattle public relations staff of the Pacific Telephone and Telegraph Company, tells us about the appearance of telephone company officials before students during an economic college course session on utility corporation policy and management. Both faculty members and telephone company officials tried to make this a discussion course, not a lecture series. Classroom participation was stressed. What were some of the questions asked and what was the reaction on the students? This article tells the story of an interesting experiment.

MR. GILBERT has been with Pacific Telephone about two years. He is assigned to their Washington-Idaho area headquarters office in Seattle and helped prepare material used in the course described.

AFTER World War II naval service, he returned to the University of Washington to acquire a BA degree in journalism. Following graduation he went into the weekly newspaper field where he spent seven years.

WE gather, from correspondence with the FORTNIGHTLY's West coast editorial representative, that the course was a success. This was apparently so from the standpoint of both its management sponsors and the university faculty members and students. It has value as an exhibition of the practical beneficial effect of positive steps taken in the mutual interest of business and education.

PACIFIC TELEPHONE AND TELEGRAPH COMPANY is perhaps among the more active of the utility companies in carrying on planned programs of the sort with educational institutions. It is the editors' regret that the mechanical limitations of space did not permit additional comments upon the courses at Seattle so that the views of management sponsors and faculty members could be presented.

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The Editors

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(November 22, 1956, issue)

★

LOW-COST FINANCING OF HYDROELECTRIC PROJECTS

In this article Professor Leland B. Yeager of the University of Maryland seeks to unravel the confusion relating to low interest rates on federal power projects. Readers will find it a valuable contribution, although the subject is so complex that it is difficult to explain to citizens generally. The author is an able writer and his theory disposes of a number of possible answers and objections skillfully. The author raises the ultimate question of inflation as the final answer, but a few power projects would have so little effect on the total population that the impact would not be of overriding importance. In short, the Maryland University assistant professor of economics concludes that federal financing of power projects at low interest rates subsidizes the favored consumers of electricity. Monetary economics show how inflation makes the general public pay for this subsidy.

OPERATION OF SURFACE CARRIERS. PART II.

Part II in this second part of the 2-part series by David I. Mackie of New York, chairman of the Eastern Railroad Presidents Conference, deals with the problems of subterfuge and evasion which have characterized many operations and attempted operations of motor carriers in competition with railroads. The reactions of the Interstate Commerce Commission and other regulatory and advisory bodies are also noted in this complete and thoroughly documented account of the law and principles involved. Regulatory and other problems posed by operators of common, contract, and private carrier service over highways have had a notable impact on the national transportation economy. These problems bear directly upon the ability of the railroads to maintain their financial strength and to continue as the "hard core" of our transportation system.

PUBLIC RELATIONS OF UTILITY METERING

While this article deals primarily with metering by water utilities, it touches on a number of fundamental policy questions which are of equal interest to gas and electric utility services. As a matter of fact, the approach towards the public relations aspect of water metering may for that very reason be all the more interesting to other utility groups because it is not a subject too openly or widely discussed from that starting point. The author, Joseph S. Rosapepe, director of public relations, Case Institute of Technology, Cleveland, Ohio, discusses some aspects which are fairly common in the handling of utility metering problems generally. To do their job well, utility operators need the support and understanding of their communities. Needless to say, the utility meter on the consumer's premises is a very vital and vulnerable contact point between the public utility and the consumer which, in turn, is reflected in the collective attitude of the community towards the utility.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

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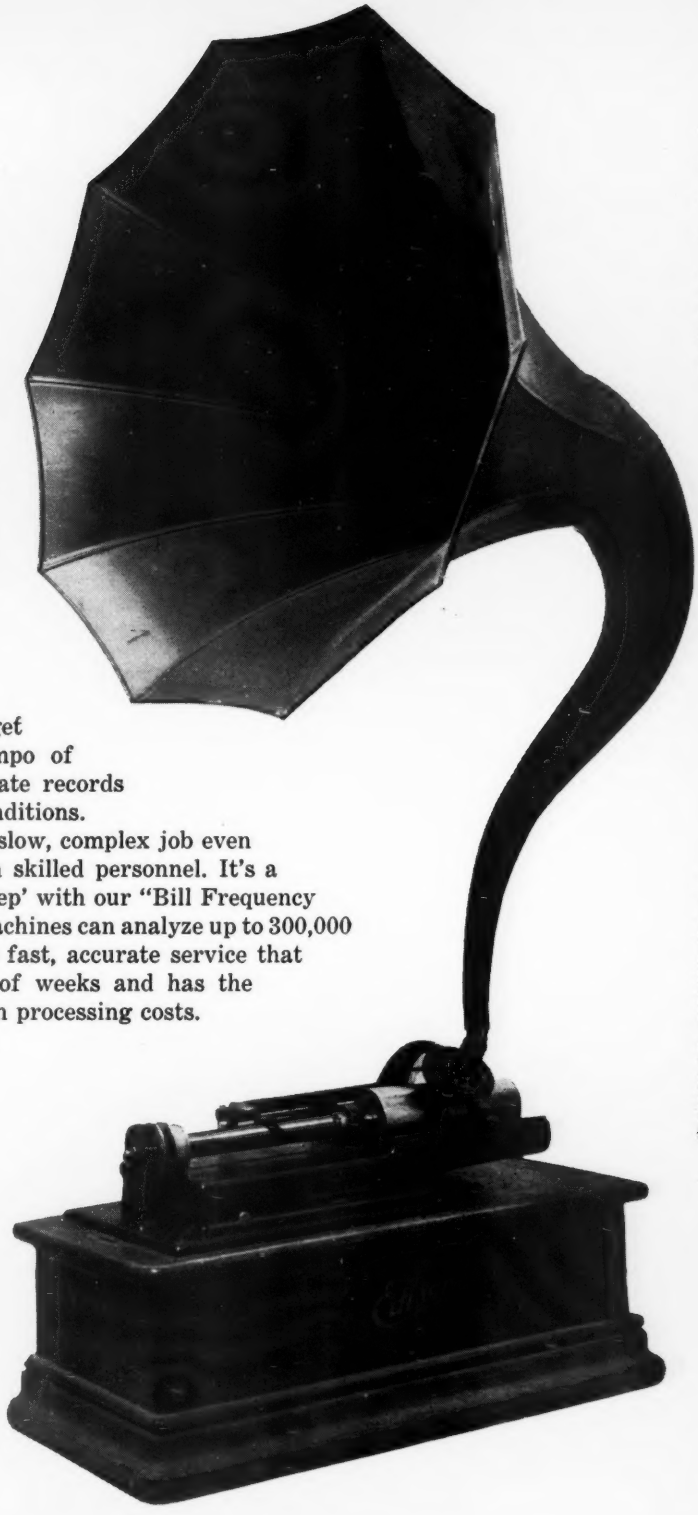

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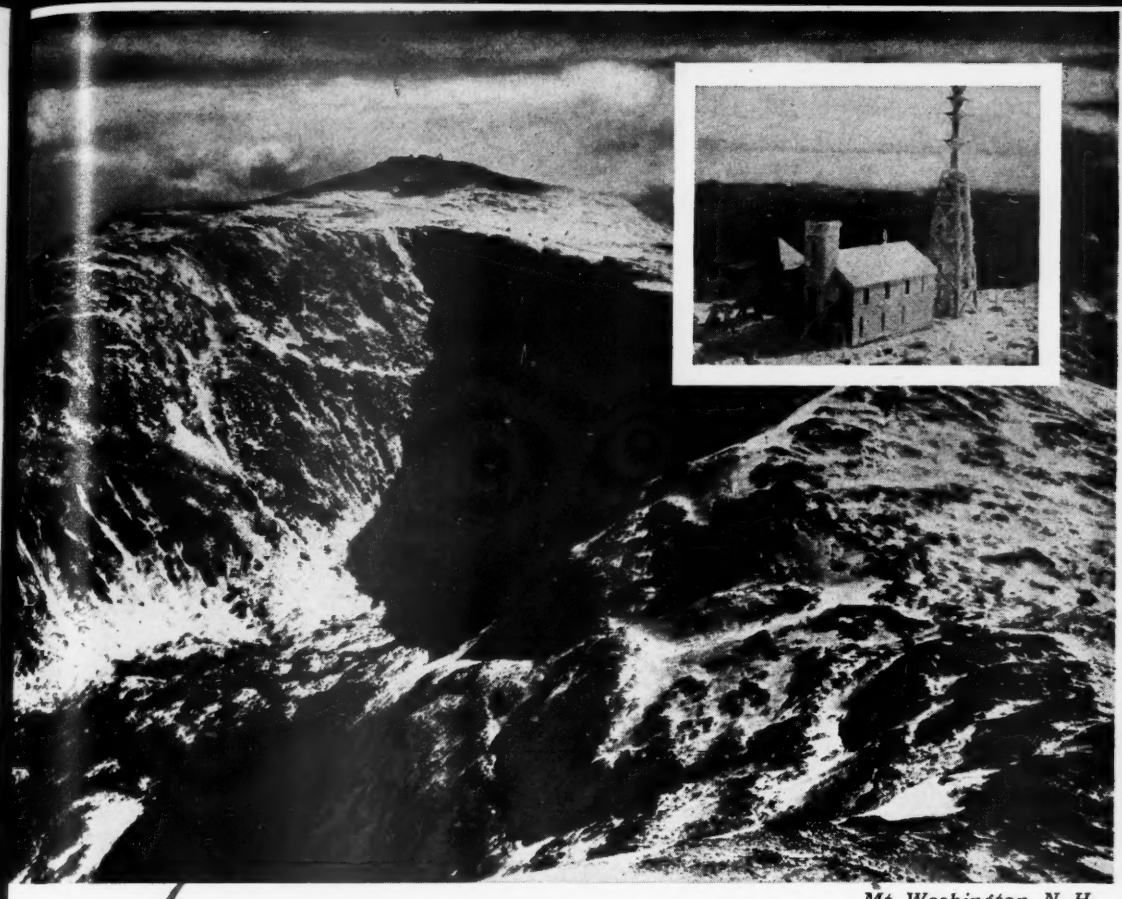

Mt. Washington, N. H.

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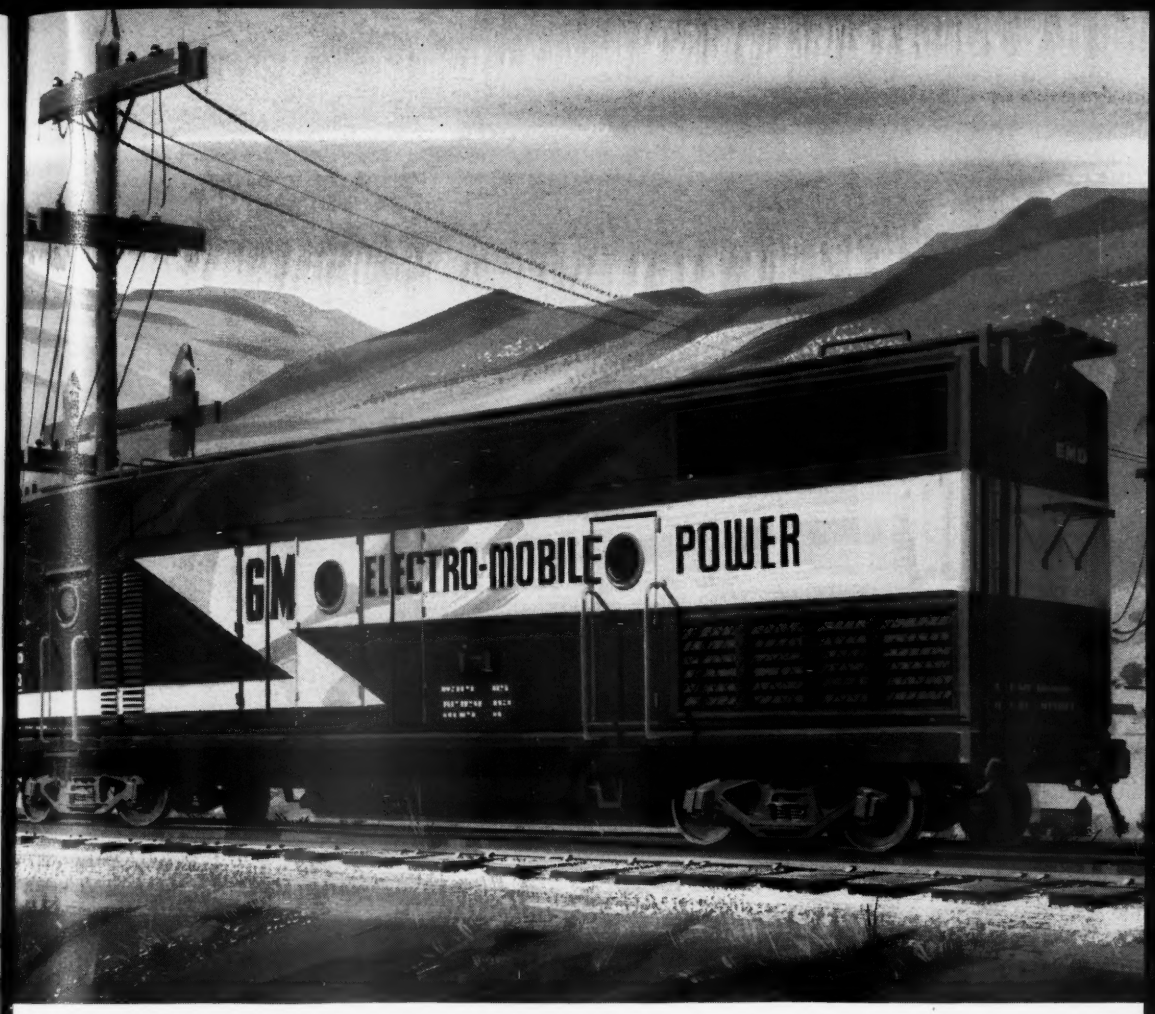

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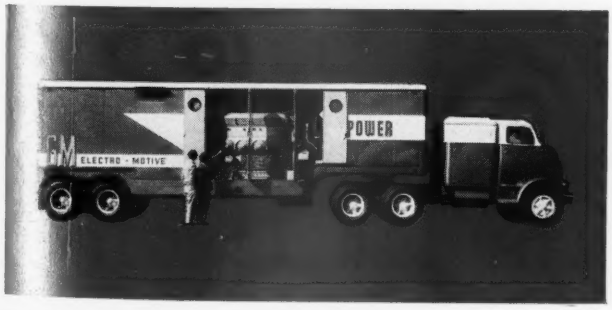

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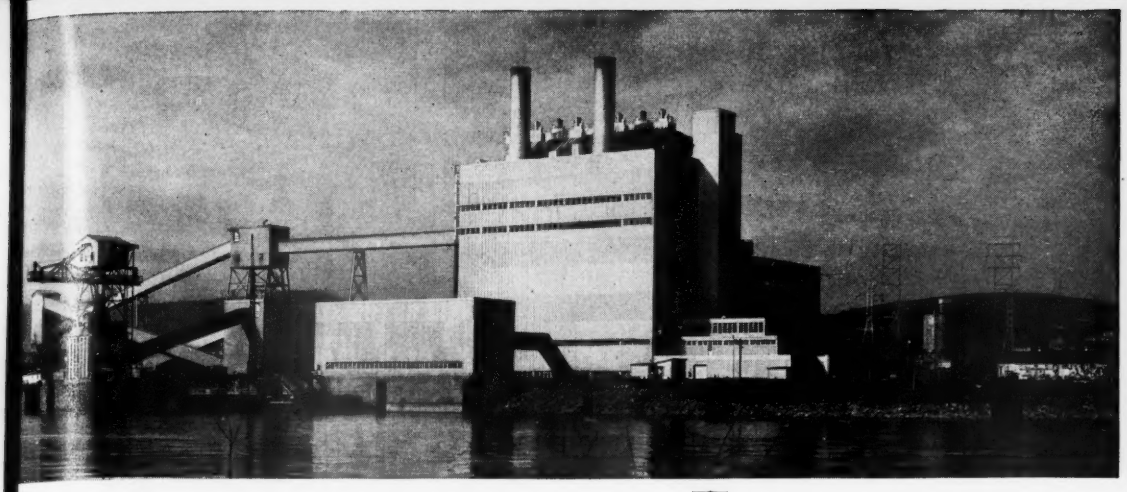

Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.

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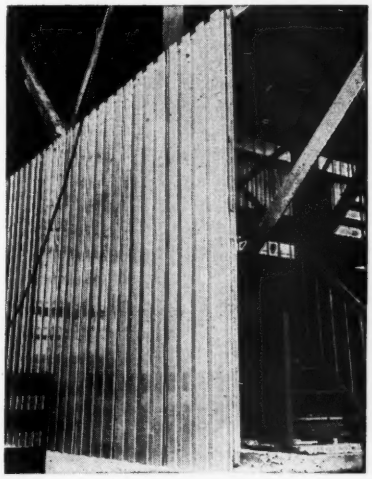
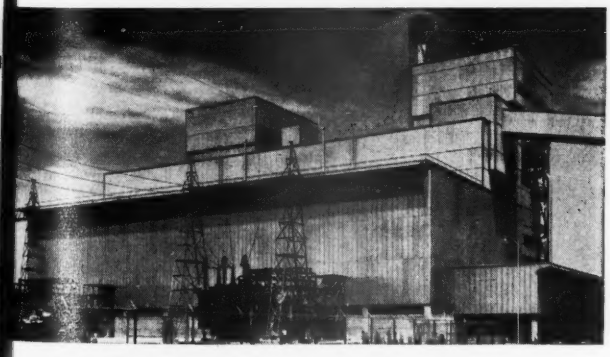


Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.

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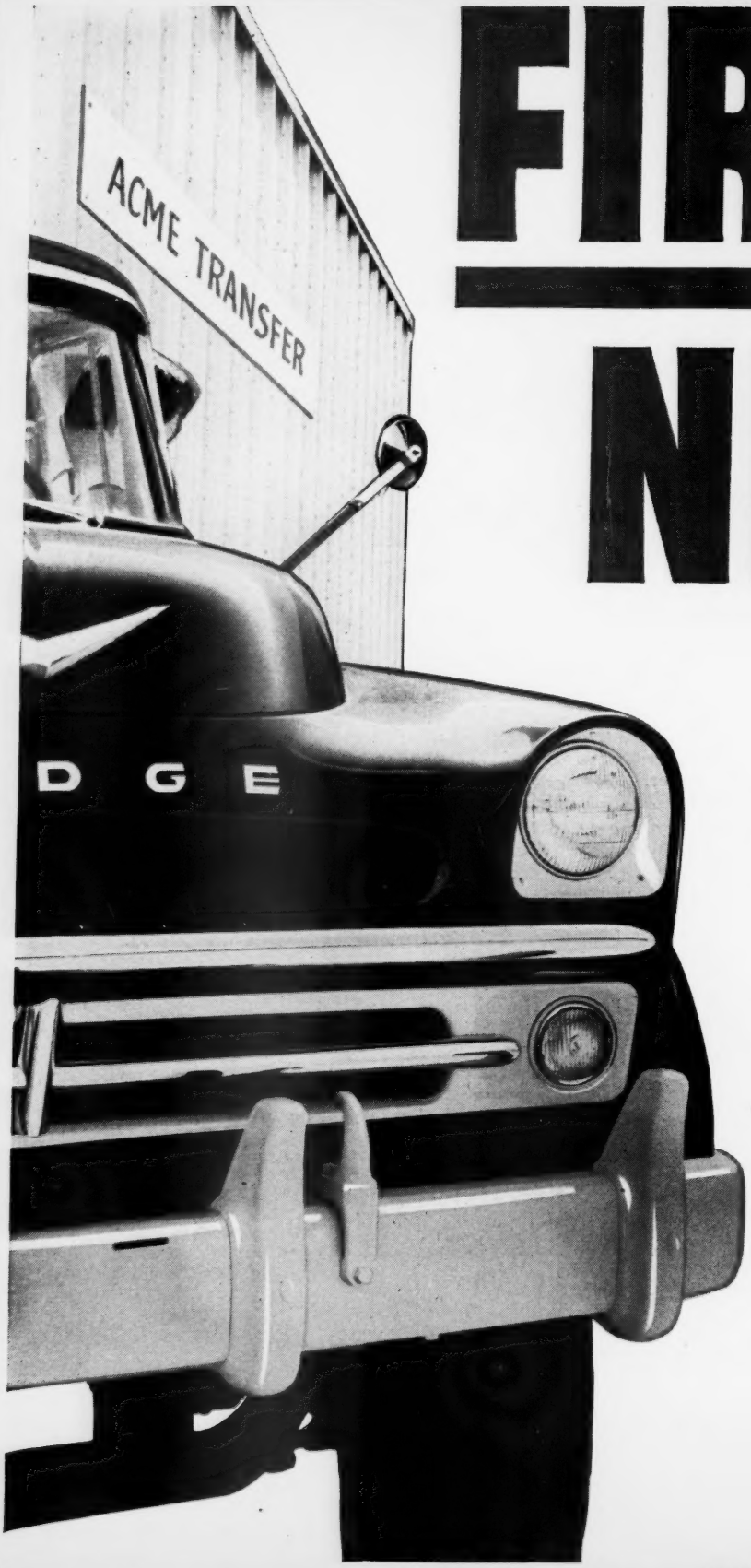

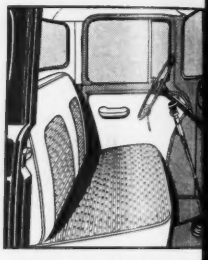

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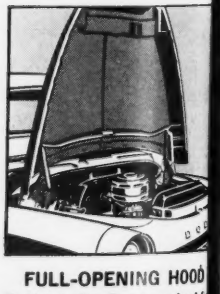

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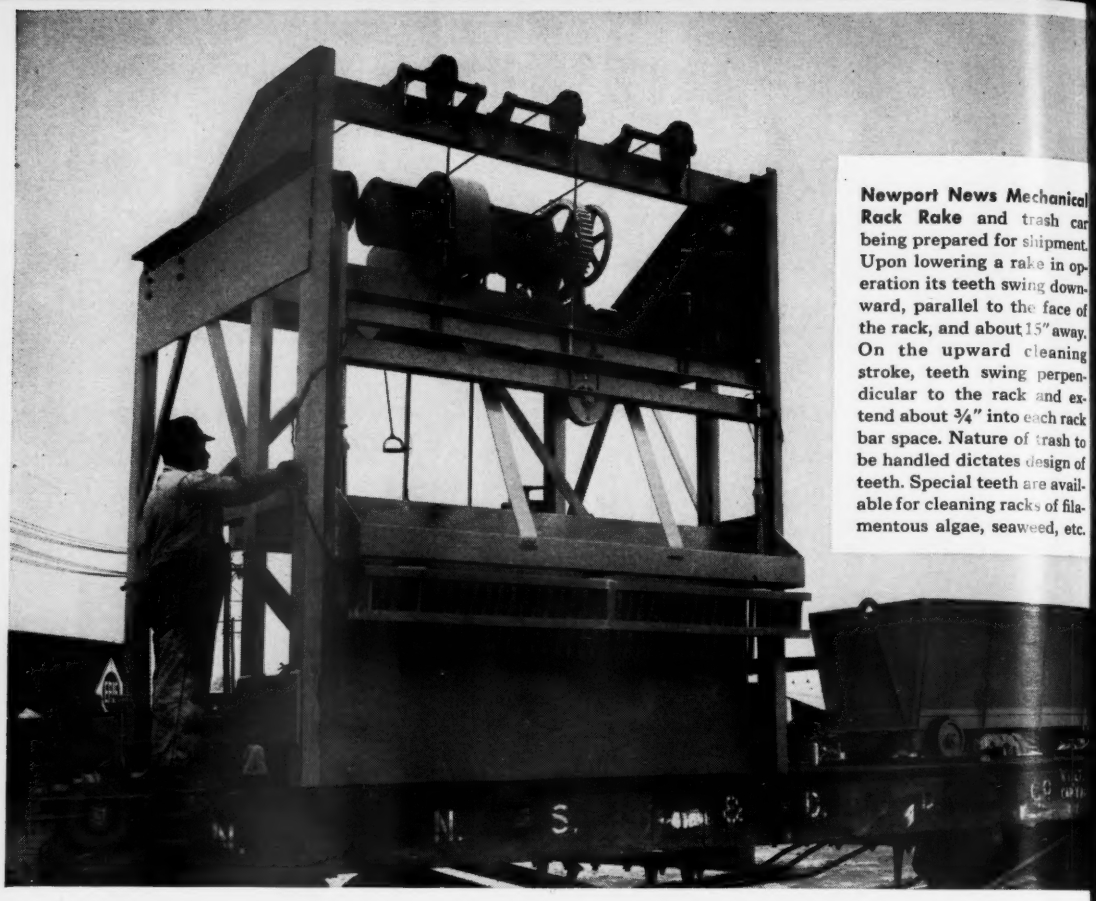

Newport News Mechanical Rack Rake and trash car being prepared for shipment. Upon lowering a rake in operation its teeth swing downward, parallel to the face of the rack, and about 15" away. On the upward cleaning stroke, teeth swing perpendicular to the rack and extend about ¾" into each rack bar space. Nature of trash to be handled dictates design of teeth. Special teeth are available for cleaning racks of filamentous algae, seaweed, etc.

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Excessive loads of trash cannot push a Newport News rake away from the racks.

And there's no chance of the rake *riding over trash* on the upward cleaning stroke. Nor will its teeth drop the debris. Because Newport News builds the rake to operate in channel guides... for *positive cleaning action.*

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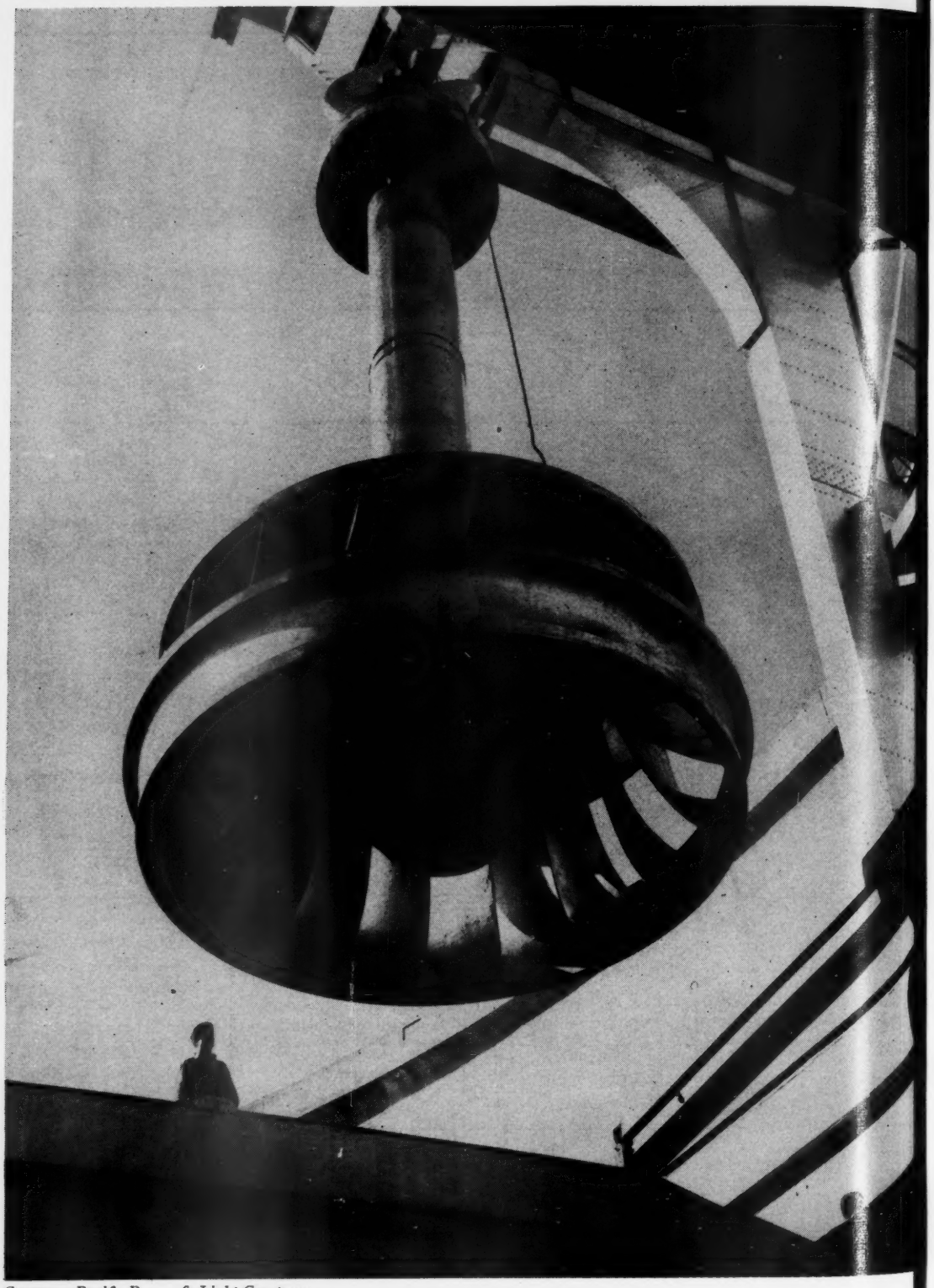
NOVEMBER

Thursday—8 *South Dakota Independent Telephone Association begins annual convention, Sioux Falls, S. D.*	**Friday—9** *Southern Gas Association begins customer accounting round-table conference, Savannah, Ga.*	**Saturday—10** *American Society of Refrigerating Engineers will hold semiannual meeting, Boston, Mass. Nov. 25-28.* ***Advance notice.***	**Sunday—11** *American Water Works Association, Florida Section, begins annual meeting, Daytona Beach, Fla.*
Monday—12 *American Petroleum Institute begins meeting, Chicago, Ill.*	**Tuesday—13** *National Rural Electric Cooperative Association, Region Nine, ends 2-day annual meeting, Spokane, Wash.*	**Wednesday—14** *American Water Works Association, North Carolina Section, ends 3-day annual meeting, Charlotte, N. C.*	**Thursday—15** *Edison Electric Institute, Industrial Relations Committee, begins meeting, New York, N. Y.*
Friday—16 *National Electrical Manufacturers Association ends 5-day annual meeting, Atlantic City, N. J.*	**Saturday—17** *Georgia Telephone Association ends 3-day annual convention, Augusta, Ga.*	**Sunday—18** *American Society of Mechanical Engineers will hold national exposition of power and mechanical engineering, New York, N. Y. Nov. 25-30.* ***Advance notice.***	**Monday—19** *Florida Telephone Association begins annual convention, Daytona Beach, Fla.*
Tuesday—20 *Southern Gas Association will hold advisory council and management conference, Point Clear, Ala. Nov. 26, 27.* ***Advance notice.***	**Wednesday—21** *American Water Works Association, Rocky Mountain Section, will hold annual meeting, Colorado Springs, Colo. Nov. 26-28.* ***Advance notice.***	**Thursday—22** *Edison Electric Institute, Accident Prevention Committee, will hold meeting, Hartford, Conn. Nov. 26-28.* ***Advance notice.***	**Friday—23** *Great Lakes Conference of Railroad and Utilities Commissioners will hold first annual convention, White Sulphur Springs, W. Va. Nov. 29, 30.* ***Advance notice.***



Courtesy, Pacific Power & Light Company

Giant Water Wheel and Shaft

This huge water wheel drives a hydro generator on the Lewis river, serving the Portland (Oregon) area.

Public Utilities
FORTNIGHTLY

VOL. 58, NO. 10 NOVEMBER 8, 1956

Operation of Surface Carriers

Part I.

Regulatory and other problems posed by operators of common, contract, and private carrier service over highways have had a notable impact on the national transportation economy.

BY DAVID I. MACKIE*

THE problems to be discussed herein have arisen primarily with respect to transportation by highway. The genesis of motor carrier regulation is therefore pertinent. That such regulation was needed in the public interest became apparent early in the development of the motor vehicle as an instrument of commerce.

By the mid-twenties efforts of the states to regulate interstate operations of motor carriers, except in matters of safety, had run inextricably afoul of the commerce clause of the Constitution and the due process clause of the Fourteenth Amendment.[1] The leading cases so holding were Buck *v.* Kuykendall, 267 US 307, PUR 1925C 483, Bush & Sons Co. *v.* Maloy, 267 US 317, PUR1925C 488, both of which were decided on March 2, 1925, Michigan Pub. Utilities Commission *v.* Duke, 266 US 570, PUR1925C 231, and Frost Trucking Co. *v.* Railroad Commission (1926) 271 US 583.[2]

The Interstate Commerce Commission as early as 1926 instituted a nation-wide investigation of motorbus and truck op-

*Chairman, Eastern Railroad Presidents Conference, New York, New York. For additional personal note, see "Pages with the Editors."

erations.[3] In 1930 the commission instituted a further investigation primarily into co-ordination of motor transport with other media of transportation.[4] The resultant reports, finding need for regulation of motor transportation of persons and property, were helpful in the formulation of subsequent legislative policies leading to federal regulation.

"The need for federal regulation of motor transportation of some kind has been apparent for several years, and each session of Congress since 1926 has had before it proposals for motor carrier legislation."[5]

PURSUANT to the provisions of the Emergency Railroad Transportation Act, 1933,[6] the President designated the late Joseph B. Eastman as federal Co-ordinator of Transportation. Upon his appointment in June, 1933, the Co-ordinator undertook elaborate surveys and studies of the need for regulation of transportation agencies and submitted to the Congress four reports on the subject.[7] In his second report (Senate Document No. 152) the Co-ordinator recommended, *inter alia,* regulation of both motor and water carriers, accompanying his recommendations with proposed forms of bills designed to accomplish the purposes intended. The bill providing for regulation of motor carriers was attached to the second report as Appendix G. In transmitting the Co-ordinator's second report (Senate Document No. 152) to the president of the Senate, the Honorable William E. Lee, chairman of the Interstate Commerce Commission, stated that enactment into law of the motor and water carrier regulation bills was "imperatively necessary under present conditions."[8] He further noted that the proposed motor carrier bill contained changes from the so-called "Rayburn Bill"[9] in line with suggestions in respect of his bill which had been made to Chairman Rayburn[10] by the commission, suggestions which "we believe still further improve that bill." The bill (Appendix G to the second report, Senate Document 152) was introduced in the 73rd Congress as S 3171. It was resubmitted as Appendix VII to the Co-ordinator's third report[11] "with modifications which have been found desirable in the light of suggestions and criticisms received and the further consideration of the subject by the Co-ordinator and his staff."[12] With characteristic foresight the Coordinator recognized the dangers to common carriage posed by the potential growth of contract and private carriage.

In his second report the Co-ordinator, in commenting on the "serious practical difficulties" which will be encountered in federal regulation of the trucks, said:

> . . . The chief difficulties will be met . . . in preventing private carriers from engaging in for-hire operations without proper authorization . . .[13]
>
> As the legislation proposed would debar the private operator from transporting freight for hire, unless he submits to the regulation proposed for for-hire operators, his opportunity to fill up outbound loads and to pick up for-hire traffic on return trips would be materially limited. *Such a restriction is justified for the protection of the common carrier upon whom the general public must depend.*[14] (Italics supplied.)

In his third report the Co-ordinator said:

These private and contract carriers might be ignored if they did not have a tendency to demoralize or impair the system of common carriage which undertakes to serve all alike and is of prime importance to the country. For example, private carriers are assured of a large tonnage of which they cannot be deprived, but they may also have some available space, particularly on return trips, which they can use for nonproprietary tonnage. In order to fill this space, which they regard as a by-product, they may make special rates below the level which common carriers find necessary, with the result that important parts of the business of the latter are unsettled, depressed, and demoralized.

The contract carrier may differ from the common carrier only in the fact that he undertakes to skim the cream of the traffic and leave the portion which lacks the butterfats to his common carrier competitor.

Obviously, such operations can have very unfortunate and undesirable results.

. . . So far as regulation is directed against private and contract operators, it should be for the chief purpose of protecting the common carriers against unfair and demoralizing competition.[15]

EACH of the bills recommended by the Co-ordinator,[16] however, limited its treatment of "private carrier of property by motor vehicle" to a definition of the term which was inserted in connection with an authorization of the commission to investigate and report on "the qualifications and maximum hours of service of employees of all motor carriers and private carriers of property by motor vehicle."[17]

The years of study, recommendations, and time-consuming legislative processes finally bore fruit in 1935 following the introduction by Senator Burton K. Wheeler, chairman, Senate Committee on Interstate Commerce, on February 4th of that year of S 1629. That bill, modeled closely on the legislation recommended by the Co-ordinator, was promptly enacted as the Motor Carrier Act, 1935.[18] Its progress through the legislative process was both smooth and rapid, in large measure due to the careful attention the subject had received in recent years.[19]

In its report[20] on S 1629 the Senate Committee on Interstate Commerce said, in part:

> The bill provides for the regulation by the Interstate Commerce Commission of all agencies engaged in for-hire motor transportation. The regulation provided for contract carriers is less

¶ "THE *Interstate Commerce Commission as early as 1926 instituted a nation-wide investigation of motorbus and truck operations. In 1930 the commission instituted a further investigation primarily into co-ordination of motor transport with other media of transportation. The resultant reports, finding need for regulation of motor transportation of persons and property, were helpful in the formulation of subsequent legislative policies leading to federal regulation.*"

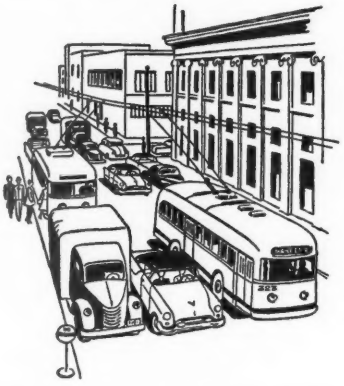
extensive than that proposed for common carriers. With respect to both types the regulation is adapted to the special characteristics of their respective operations and is carried no further than is necessary in the interest of the public and of the carriers. No regulation is proposed for private carriers except that an amendment adopted in committee authorizes the commission to regulate the "qualifications and maximum hours of service of employees and safety of operation and equipment" of private carriers of property by motor vehicle in the event that the commission determines there is need for such regulation. . . . The bill as originally introduced provided in § 325 for an investigation and report upon the need for federal regulation of the qualifications and maximum hours of service of employees of motor carriers of all classes. Such an investigation is still authorized (§ 225), but if the commission determines after investigation that there is need for such regulation it may impose reasonable requirements without further legislation.

THE Motor Carrier Act, 1935, defined common, contract, and private carriers by motor vehicle.[21] It prohibited common carriers by motor vehicle from operating over the public highways "unless there is in force with respect to such carrier a certificate of public convenience and necessity issued by the commission authorizing such operations."[22] Subject to the grandfather clause contained in the first proviso in § 206(a) the act provided for the issuance of a certificate "to any qualified applicant therefor . . . if it is found that the applicant is fit, willing, and able properly to perform the service proposed . . . and that the proposed service, to the extent to be authorized by the certificate, is or will be required by the present or future public convenience and necessity."[23]

The act prohibited persons from engaging in the business of a contract carrier by motor vehicle on the public highways "unless there is in force with respect to such carrier a permit issued by the commission, authorizing such person to engage in such business."[24] Again, subject to the grandfather clause contained in the first proviso in § 209(a), the act provided for the issuance of a permit "to any qualified applicant therefor . . . if it appears . . . that the applicant is fit, willing, and able properly to perform the service of a contract carrier by motor vehicle . . . and that the proposed operation, to the extent authorized by the permit, will be consistent with the public interest and the policy declared in § 202(a) of this part."[25]

While the act did not purport to impose any degree of economic regulation over private carriers, it did place upon the commission the duty "to establish for private carriers of property by motor vehicle, if need therefor is found, reasonable requirements to promote safety of operation, and to that end prescribe qualifications and maximum hours of service of employees, and standards of equipment."[26]

THE theory of regulation of motor vehicles so embodied in the Motor Carrier Act, 1935,[27] whereby a common carrier is required to obtain a certificate upon a showing of public convenience and necessity, a contract carrier is required to obtain a permit upon a showing merely of consistency with the public interest and



Classification of Motor Carriers

"FOLLOWING *passage of the Motor Carrier Act, 1935, the question of the category within which the operations of motor carriers fell—*I.E., *common, contract, or private—became of paramount importance. The issue often arose in connection with the exercise of rights conferred by the grandfather clauses. Frequently the issue was raised by the filing with the commission of an application for a permit to operate as a contract carrier or a certificate to operate as a common carrier. The applicant alleged that its operations were not those of a contract or common carrier but rather constituted private carriage only. In order to secure determination of this question by the commission the applicant requested that the application be dismissed for want of jurisdiction, otherwise that it be granted.*"

the declared national transportation policy, and private carriers are defined for the purpose of safety qualifications, continues substantially unchanged today under the provisions of the Interstate Commerce Act [28] presently in effect.

WHILE the Motor Carrier Act, 1935,[29] was twice amended in 1938,[30] those amendments are outside the scope of this article.

However, the Transportation Act of 1940,[31] among its extensive amendments to the act,[32] contained amended definitions of both "common carrier by motor vehicle" and "contract carrier by motor vehicle."[33] The exact changes from the language of these definitions as contained in the Motor Carrier Act, 1935, are indicated in the margin.[34]

It will be observed that the amended definitions of common carrier and contract carrier each deleted the phrase "by a lease or any other arrangement." The House Committee on Interstate and Foreign Commerce stated that it considered it "best to leave this or any similar language out of the definitions" because: "Its

application is not clear. Presumably, it was intended to cover the case of a person who, though not performing service as a carrier, leased vehicles to another person to be used by such other person for his own purposes."[35] It will also be observed that the amended definition of contract carrier deleted the words "special and." This amendment is of importance in connection with the discussion of contract carriage, *infra.*

The changes in these two definitions contained in S 2009 (which became the Transportation Act of 1940[36]) were stated[37] to have had the sole purpose of eliminating carriers performing pick-up, delivery, and transfer service.[38]

Private Carriage

FOLLOWING passage of the Motor Carrier Act, 1935,[39] the question of the category within which the operations of motor carriers fell—*i.e.,* common, contract, or private—became of paramount importance.[40] The issue often arose in connection with the exercise of rights conferred by the grandfather clauses. Frequently the issue was raised by the filing with the commission of an application for a permit to operate as a contract carrier or a certificate to operate as a common carrier. The applicant alleged that its operations were not those of a contract or common carrier but rather constituted private carriage only. In order to secure determination of this question by the commission the applicant requested that the application be dismissed for want of jurisdiction, otherwise that it be granted.[41] The same issues were raised in other cases when the commission sought an injunction under § 222(b) of the act[42] against continuance of allegedly unlawful operations, in the absence of a requisite permit or certificate.

There is no "commodities clause" (§ 1 (8)) applicable to motor carriers so that industries are not barred from carrying their own products.

Early in its administration of the act the commission drew a line of distinction between, on the one hand, a person "engaged primarily in the transportation of property in interstate or foreign commerce by motor vehicle for compensation" whom it regarded as a common or contract carrier, irrespective of ownership of the property transported, and, on the other hand, motor vehicle operations which are merely "incident to the conduct of some other commercial enterprises such as that of a mercantile or manufacturing concern."[43]

Only the ownership of property manufactured in applicant's plants and transported in its motor vehicles "as an integral part of its business of manufacturing and selling the commodities" was considered "material" in establishing the carriage as "private" in an early case.[44]

IN another early case the transportation of automobiles by a dealer from the factory to his place of business for future sale was held to be private carriage as "merely incidental to the conduct of applicant's principal business as an automobile dealer and distributor." In the same case other activities of the same applicant were held not to constitute private carriage. In those instances the applicant transported new automobiles from factory to subdealers and others, rendering itemized invoices showing separately the cost of the automobiles, the amount of freight charges, and other details. These activi-

ties were held to be "transportation for hire," "not merely incidental to the conduct of applicant's business as an automobile dealer, or an integral part of that business but were engaged in as a distinct and separate undertaking."[45]

The fact that the transporter is engaged in a noncarrier enterprise so that the transportation is merely incidental and in furtherance of that enterprise is important, and the presence of physical facilities as evidence of the noncarrier enterprise is helpful in establishing private as opposed to for-hire carriage.[46] A coal, sand, and rock yard was operated by the transporter in Dull and a coal yard in Clayton,[47] manufacturing plants in Congoleum-Nairn,[48] a building materials yard in Woitishek, and oil distribution facilities in Tank Car Oil Corporation.[49]

USE of a so-called "compensation test" to differentiate between private and for-hire carriage has been strongly urged upon the commission by those seeking to have particular carriage classed as "for-hire." In justification of that standard it was pointed out that under the statutory definition[50] one is a private carrier only if he is "not included in the terms 'common carrier by motor vehicle' or 'contract carrier by motor vehicle.'" And the term "compensation" is found only in the definitions of common and contract carrier, not in the definition of private carrier. From these bases it was reasoned that whenever compensation for transportation is found, be it direct or indirect, the carrier is a common or contract carrier, subject only to the express exceptions contained in the act. This doctrine, though strongly urged upon the commission in Woitishek,[51] was not applied in that decision though some of the language regarding compensation "was not clear and lent some support to the controversy which later came to a climax in the Lenoir Chair contract carrier application."[52]

THE compensation test received judicial recognition in Stickle[53] and Jamestown Sterling.[54] But it has not achieved broad acceptance. One authority has criticized it in this way: Any organization which transports its products itself does so only to derive a financial benefit from so doing. The primary reason is to reduce transportation costs so that earnings are increased. The conclusion accordingly is that "if the compensation test is strictly applied, all industrial carriage would appear to be for-hire carriage."[55]

In 1942 the circuit court of appeals, tenth circuit, on consecutive days handed down two decisions which had a most important effect upon the future development of the law in this field. The first

¶ "DIFFICULTIES *in distinguishing between private motor carriers and for-hire motor carriers still persist. The commission itself has called attention to them. Noting the difficulties of discovering and preventing the deceptions used to give for-hire operations the appearance of private carriage, the commission has cited the alleged buying and selling of commodities by the truck operator and the purported leasing of vehicles to shippers.*"

was Clayton.[86] His activities were sought to be enjoined by the commission on the ground that he was holding himself out as a common or contract carrier in interstate commerce for compensation without complying with the act. The facts of the case were that Clayton resided at Ucon, Idaho, where he maintained a small coal yard at his home, keeping on hand about ten tons or a truck load of coal. He had customers at Ucon and in neighboring towns. He purchased coal at the mine in Utah for $3 a ton, transported it in his own truck over the highways at a transportation cost of $2.55 per ton, and sold the coal for $8.50 per ton. He paid for the coal out of his own funds, selling both for cash and on credit, soliciting orders both before and after transporting the coal from the mine. He did not purchase coal at the mine and transport it to fulfill any specific or particular order.

The court held that Clayton was a private carrier, engaged in a bona fide coal business, that he transported coal of which he was the owner for the purpose of subsequent sale and in furtherance of a commercial enterprise. In the course of its opinion the court noted that Clayton owned the coal until he delivered it, transported it for the purpose of sale, did not buy and sell coal to fulfill particular orders, made no differentiation in price between coal delivered at Ucon and other near-by towns, although delivery to the other towns entailed a longer haul, and that the sale price of the coal was determined by competitive conditions.

THE second case referred to was Stickle *v.* Interstate Commerce Commission, 128 F2d 155, wherein the facts were as follows: Stickle owned and operated ten trucks which it used to transport lumber over the highways from various lumber mills in Texas, Arkansas, and Louisiana to destinations in Oklahoma, Texas, Kansas, Missouri, and Illinois. The drivers were employees of Stickle and the vehicles were registered in its name. Stickle leased lumber storage facilities at Oklahoma City where approximately 5 per cent of the lumber handled was stored. Stickle circulated quotations of prices on various grades of lumber to prospective purchasers and 75 per cent to 80 per cent of the lumber handled was purchased by Stickle after receipt of orders therefor. While its methods of determining prices to its customers varied, at the time of trial Stickle had adopted a plan whereby the territory served was divided into zones and delivered prices were quoted in each zone, varying in accordance with the distance from the mill, the difference in prices being due to a difference in the charges made for transportation. The amount Stickle received from its customer above cost price of the lumber at the mill was approximately the equivalent of the charge which a carrier who had complied with the Motor Carrier Act would make for transporting the lumber. All lumber transported by Stickle was its property while being transported. The major portion of Stickle's capital investment was in its transportation facilities.

UPON those facts the appellate court sustained the findings of the trial court that Stickle was primarily engaged in the transportation of lumber for compensation under individual contracts with customers; that the amount it received in excess of cost approximated the transportation charges of a duly authorized for-

A Standard Test for Carriers

"USE of a so-called 'compensation test' to differentiate between private and for-hire carriage has been strongly urged upon the commission by those seeking to have particular carriage classed as 'for-hire.' In justification of that standard it was pointed out that under the statutory definition one is a private carrier only if he is 'not included in the terms "common carrier by motor vehicle" or "contract carrier by motor vehicle."' And the term 'compensation' is found only in the definitions of common and contract carrier, not in the definition of private carrier. From these bases it was reasoned that whenever compensation for transportation is found, be it direct or indirect, the carrier is a common or contract carrier, subject only to the express exceptions contained in the act."

hire carrier; that Stickle's transportation was not an incident to a commercial enterprise; and that, on the contrary, the buying and selling of lumber was a means and device employed by Stickle to enable it to engage in the transportation of lumber as a contract carrier without complying with the act. "The transportation is not merely incidental to the business of selling lumber. It is a major enterprise in and of itself."[57]

Thus was born the "primary business" test. The following year Division 5 of the commission, in its decision in Woitishek, summarized the effect of Clayton and Stickle in the following words:

When these two decisions, issued on consecutive days, by a three-judge court, two of whose members participated in both decisions, are read together, it is clear that the court, disregarding form, based its conclusion in each case on what it deemed to be the *primary business* of the operator in each instance. Had it been controlled by the fact that compensation for transportation was received in a form identifiable as such, it would, of necessity, have found that *both* operators were performing transportation for compensation within the meaning of § 203(b)(14) and (15). Instead, in the Clayton

Case where a bona fide coal dealer status was shown, the operator was found to be a private carrier, whereas in the Stickle Case where a bona fide non-carrier business was not established, the operator was found to be a carrier for hire. The only language in either report to even suggest that the operator's primary business was not the controlling consideration is the statement in the Stickle Case that "the primary test in §§ 203(a) (14) and 203(a) (15) is transportation for compensation." Such statement is, however, nothing more than a reiteration of the statute. The important question is, what is the meaning of "for compensation"? Consistently with our view above, the court found, in effect, that transportation "for compensation" is that supplied *with a purpose to profit from the transportation operation as such,* rather than that supplied merely as an incident to some other primary business, even though in the latter case the cost of any incidental transportation which may be performed is recouped by a charge, which may or may not be, identifiable as compensation for transportation as such.[58]

WOITISHEK, a supplier of lumber, cement, and other building materials, was held to be a private carrier. His transportation activities, involving the operation of his own highway equipment to transport materials from sources of supply in California to his yard at Las Vegas, the delivery of materials from his yard at Las Vegas to purchasers at Nevada points, and the transportation of material already sold directly from the sources of supply to the point of use, were deemed to be an incident and in furtherance of his primary business of dealing in building materials without any purpose to profit from the transportation as such.

While Woitishek was an important case in the development of the primary business test, the leading case is Brooks Transportation Company.[59]

The case was a consolidation of the two so-called Lenoir and Schenley cases. Each of the cases originated before the commission and raised the question as to whether the carriage involved was contract or private. In both cases, the commission held the carriage to be private.[60] The two proceedings were consolidated on rehearing by the commission and affirmed.[61]

The Brooks Case was a suit to enjoin, vacate, and set aside commission orders. It was instituted in a three-judge court where the findings of the commission were upheld. After the Brooks decision was rendered an appeal to the Supreme Court of the United States was taken and the judgment of the district court was affirmed *per curiam.*[62]

IN the Lenoir Case the company was engaged in the manufacture of furniture. Since 1929 it had transported a portion of its products in its own trucks to customers in several states and had also transported materials and supplies back to its plants. The furniture was sold f.o.b. its factories and delivery charges were invoiced separately at a figure comparable to rail or for-hire motor carrier charges. This was done so that the delivered price would be the same regardless of the method of transportation used. Supplies and materials were purchased f.o.b. origin although sometimes a freight allowance was made by the suppliers. Lenoir did not hold

itself out to the general public or to anyone as a common carrier by motor vehicle; neither were its services available to anyone as a contract carrier.

Schenley was engaged in the distribution and sale of liquor produced by its subsidiary corporations. It took title to the entire output of its subsidiaries at the distilleries. Schenley thereupon delivered the goods to its customers in its own trucks, selling them f.o.b. destination. The sales price was the selling price of the goods at the distillery plus an amount roughly equal to the rail rate from origin to destination. Thus a uniform delivery price was maintained with that applying to liquor which was transported by rail or motor common carriers. Occasionally, Schenley carried return loads of supplies for the subsidiaries. All expenses, including loss and damage, were borne by Schenley. The court sustained the commission's holding that both Lenoir and Schenley were private carriers, approving application of the primary business test.

The doctrine has been applied in other cases.[63]

THE Taylor and Woodall cases cited in the margin are illustrative of the difficulties encountered by the commission in preventing what it regards as unlawful for-hire carriage—sometimes referred to as "buy and sell" activities.

The facts in the Taylor Case showed him to be supplying retail lumber yards in Idaho with finished lumber which he had purchased in Oregon and transported in his own trucks to Idaho. F.o.b. contracts of sale to his customers preceded Taylor's purchases of lumber to fulfill those contracts. The appellate court's determination of private carrier status under the "primary business" test is perhaps justified in view of Taylor's required detailed knowledge of the finished lumber market which was regarded as his "primary business." But the case is border-line at best.

In Woodall private carriage status was found even though Woodall, who purported to be a poultry dealer, arranged for his customers themselves to contact the poultry processing plants to place their orders directly. The poultry so ordered was then invoiced to Woodall and he in turn invoiced his customers. The prices Woodall paid the processing plants and the prices Woodall's customers paid him were determined under an agreed formula based upon prices published daily by the Department of Agriculture. Woodall's price to his customers was a delivered price which varied depending on the dis-

¶ "THE *theory of regulation of motor vehicles so embodied in the Motor Carrier Act, 1935, whereby a common carrier is required to obtain a certificate upon a showing of public convenience and necessity, a contract carrier is required to obtain a permit upon a showing merely of consistency with the public interest and the declared national transportation policy, and private carriers are defined for the purpose of safety qualifications, continues substantially unchanged today under the provisions of the Interstate Commerce Act presently in effect.*"

tance Woodall transported the poultry. Even though Woodall technically owned the poultry during transportation in his leased trucks, had all the credit risks, spoilage risks, and risks of loss and damage it seems that Woodall's status should more appropriately have been classed as that of a contract carrier.

In Scott *v.* ICC[64] the commission was successful in enjoining a "buy and sell" operation involving the transportation of petroleum products where the transporter maintained no storage tanks and purchased petroleum products only for immediate and direct delivery to customers. The delivered price was cost at the refinery plus an additional charge which was comparable to, but less than, the cost of transportation by common carrier. The court concluded that the primary business of Scott was transportation under individual contracts or agreements for compensation. This decision appears eminently correct.[65]

AN interesting discussion of problems which have arisen under the primary business test was written by Frederick M. Porter and published in the *Harvard Law Review*.[66]

In the course of that article Porter says at 902:

> Under the primary business test, the commission endeavors to ascertain whether the primary business of the company is transportation or some other business activity to which transportation is merely incidental. The primary business test appears to be a sound and workable concept if applied by means of objective standards such as the relative amount of investment in transportation facilities and the facilities devoted to other use [citing Buskirk, Common Carrier Application, 49 MCC 887, 7 Fed Carriers Cases, paragraph 31,631 (1949)], the proportions of total revenues derived from transportation and other activities [citing Woitishek (note 46, *supra*)], the proportion of employee payroll paid for transportation and other activities [citing Woitishek], or, in cases where the applicant is a broker or dealer, the ownership of substantial storage facilities [citing Woitishek] and the average amount of inventory on hand. If the company was engaged in substantial nontransportation activities for a considerable period before performing its own transportation, that factor should also be given weight [citing Woitishek].

PORTER'S comparison of Klein[67] with Butkus[68] is illustrative of some of the difficulties to which the primary business test leads. In the Klein Case jobbers sent dress materials to a dress manufacturer who manufactured the pieces into dresses and returned them to the jobbers in his own vehicles. The manufacturer did not take title to the dress goods, but was merely a bailee. The commission held that the transportation of the dresses to the jobbers was solely in connection with the primary business of manufacturing dresses and that Klein was a private carrier.

In the Butkus Case a company engaged in processing a cleaning compound, which remained the property of the bailor for whom the processing was performed, returned the cleaning compound to the bailor or delivered it to the bailor's customers in its own vehicles. The commission held that its primary business of processing the cleaning compound ter-

minated when the processing was completed, and that the subsequent transportation was without direct relation to the primary business. The author notes that the only distinction between the cases appears to be that in Butkus a separate charge was made for transportation whereas in Klein the transportation charge was not identifiable as such.

Thus has the commission, in purporting to apply the primary business test, sometimes confusingly returned to the compensation test and in effect applied them both.[69]

DIFFICULTIES in distinguishing between private motor carriers and for-hire motor carriers still persist. The commission itself has called attention to them. Noting the difficulties of discovering and preventing the deceptions used to give for-hire operations the appearance of private carriage, the commission has cited the alleged buying and selling of commodities by the truck operator and the purported leasing of vehicles to shippers. It was in this connection that it called the attention of the Senate Small Business Committee[70] to Taylor and Woodall[71] and Empire Box.[72]

The commission in 1953 called to the attention of the Congress its disturbance over the growth of "buy and sell" activities of purported private carriers.[73]

The commission again called this situation to the attention of the Congress the following year.[74]

In its 69th Annual Report (November 1, 1955) the commission once more commented on this subject as follows:

> There are also . . . many private motor and water carriers, and the competition of such carriers creates increasingly difficult problems for regulated carriers. Because of the lack of effective legislation and adequate means of enforcing present statutes, practices of persons who operate unlawfully in for-hire service, such as the "buy and sell" operations discussed in our last report and mentioned later herein, add further to the difficulties of regulated carriers (page 7). . . .
>
> The "buy and sell" method of operation whereby bills of sale, invoices, et cetera, are issued to make the goods being transported appear to be those of the vehicle owner is likewise growing to the extent that a very real enforcement problem exists. In most cases, these . . . practices appear to be only subterfuges whereby vehicle owners perform transportation for compensation without the required operating authority (page 99).

Footnotes

[1] U. S. Constitution. Art I, § 8, cl. (3); U. S. Constitution. Amendment XIV, § 1.

[2] See also: (1928) Sprout *v.* South Bend, 277 US 163; Stephenson *v.* Binford (1932) 287 US 251, PUR1933A 440; Continental Baking Co. *v.* Woodring (1932) 286 US 352, PUR1932E 429; Charles B. Nutting and James C. Kuhn, Jr., "Motor Carrier Regulation—the Third Phase," 10 *University of Pittsburgh Law Review* 477 (482).

[3] Motorbus and Motor Truck Operation, 140 ICC 685 (1928).

[4] Co-ordination of Motor Transportation, 182 ICC 263 (1932). See also proposed report of Examiner Flynn, printed as Senate Document No. 43, 72d Congress, 1st Session.

[5] Senate Report No. 482, 74th Congress, 1st Session, 2 (April, 1935); ". . . from March 3, 1925, when the first motor carrier regulatory bill . . . was introduced . . . to 1935, there were introduced in Congress thirty-four separate bills to regulate motor carriers, and not a session of Congress during this period failed to consider this regulatory

issue." "The Motor Carrier Act of 1935," by James C. Nelson, *Journal of Political Economy*, Vol. 44, p. 465 (August, 1936).

[6] Act of June 16, 1933, 48 Stat 211.

[7] Regulation of Railroads (Senate Document No. 119, 73rd Congress, 2d Session) (January, 1934); Regulation of Transportation Agencies (Senate Document No. 152, 73rd Congress, 2d Session) (March, 1934); Report of the Federal Co-ordinator of Transportation, 1934 (House Document No. 89, 74th Congress, 1st Session) (January, 1935); and Report of the Federal Co-ordinator of Transportation, 1935 (House Document No. 394, 74th Congress, 1st Session) (January, 1936).

[8] Senate Document No. 152, 73rd Congress, 2d Session, Letter of Transmittal.

[9] HR 6836, 73rd Congress, 2d Session.

[10] Sam Rayburn, Texas, was chairman of the House Committee on Interstate and Foreign Commerce during the 73rd Congress as well as the 1st Session of the 74th Congress—during which the Motor Carrier Act of 1935 (act of August 9, 1935, 49 Stat 543) was enacted.

[11] House Document No. 89, 74th Congress, 1st Session.

[12] *Id.* at 59.

[13] Senate Document No. 152, 73rd Congress, 2d Session, 29.

[14] *Id.* at 33.

[15] *Op. cit.* Note 11, *supra*, at 17.

[16] Appendix G, Second Report (Senate Document No. 152, 73rd Congress, 2d Session), and Appendix VII, Third Report (House Document No. 89, 74th Congress, 1st Session).

[17] By § 325 of each bill the term "private carrier of property by motor vehicle" was defined as "any person not included in the terms 'common carrier by motor vehicle' or 'contract carrier by motor vehicle' as defined in this part, who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for the purpose of sale, lease, rent, or bailment, or in furtherance of any commercial enterprise." This section likewise authorized the investigation and report referred to in the text.

[18] Act of August 9, 1935, 49 Stat 543.

[19] S 1629 (74th Congress, 1st Session). Introduced by Senator Wheeler on February 4, 1935, referred to Senate Interstate Commerce Committee. Hearings commenced February 25, 1935. Bill favorably reported with amendments by Senate Interstate Commerce Committee on April 12, 1935 (Senate Report No. 482, 74th Congress, 1st Session). Bill passed Senate April 16, 1935. See *Congressional Record* April 15, 1935, pp. 5628, 5649-5670. Bill referred to House Committee on Interstate and Foreign Commerce, April 17, 1935. Bill favorably reported with amendments by House Committee on Interstate and Foreign Commerce, July 24, 1935 (House Report No. 1645, 74th Congress, 1st Session). Bill passed House with amendments August 1, 1935. See *Congressional Record* of July 31, 1935, pp. 12196-12200 and 12204-12237, and August 1, 1935, pp. 12278-9. Senate agreed to House amendments on August 5, 1935. See *Congressional Record* of that date, pp. 12459-60. Approved August 9, 1935 as Public Law No. 255.

[20] *Op. cit.* Note 5, *supra*, p. 1.

[21] "Section 203(a) As used in this part . . .

"(14) The term 'common carrier by motor vehicle' means any person who or which undertakes, whether directly or by a lease or any other arrangement, to transport passengers or property, or any class or classes of property, for the general public in interstate or foreign commerce by motor vehicle for compensation, whether over regular or irregular routes, including such motor vehicle operations of carriers by rail or water, and of express or forwarding companies, except to the extent that these operations are subject to the provisions of Part I.

"(15) The term 'contract carrier by motor vehicle' means any person, not included under paragraph (14) of this section, who or which, under special and individual contracts or agreements, and whether directly or by a lease or any other arrangement, transports passengers or property in interstate or foreign commerce by motor vehicle for compensation. . . .

"(17) The term 'private carrier of property by motor vehicle' means any person not included in the terms 'common carrier by motor vehicle' or 'contract carrier by motor vehicle,' who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for the purpose of sale, lease, rent, or bailment, or in furtherance of any commercial enterprise."

[22] Section 206(a).

[23] Section 207(a).

[24] Section 209(a).

[25] Section 209(b).

[26] Section 204(a) (3).

[27] 49 Stat 543.

[28] Act of February 4, 1887, as amended, 49 USC 1 *et seq.* It must be remembered that §§ 200-300 of the Interstate Commerce Act appear in the United States Code correspondingly numbered in the 300-400 group. Thus § 207 of the act is § 307 of the code.

As to common carriers, see §§ 206 and 207 of the act, as to contract carriers see § 209 of the act, and as to applicability of safety requirements to private carriers see § 204 (3) of the act.

[29] 49 Stat 543.

[30] 52 Stat 1029; 52 Stat 1236.

[31] Act of September 18, 1940, 54 Stat 898.

[32] Act of February 4, 1887, as amended, 49 USC 1 *et seq.*

[33] 54 Stat 920.

[34] "Section 203(a) As used in this part . . .

"(14) The term 'common carrier by motor vehicle' means any person [who or] which [undertakes,] *holds itself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of* [whether directly or by a lease or any other arrangement, to transport] passengers or property [,] or any class or classes [of property, for the general public in interstate or foreign commerce by motor vehicle] *thereof* for compensation, whether over regular or irregular routes [including such motor vehicle

operations of carriers by rail or water, and of express or forwarding companies, except to the extent that these operations are subject to the provisions of Part I.] *except transportation by motor vehicle by an express company to the extent that such transportation has heretofore been subject to Part I, to which extent such transportation shall continue to be considered to be and shall be regulated as transportation subject to Part I.* . . .

"(15) The term 'contract carrier by motor vehicle' means any person [not included under paragraph (14) of this section, who or] which, under [special and] individual contracts or agreements [and whether directly or by a lease or any other arrangement, transports], *engages in the transportation (other than transportation referred to in paragraph (14) and the exception therein) by motor vehicle of* passengers or property in interstate or foreign commerce [by motor vehicle] for compensation."

(Language deleted from the definitions as contained in the Motor Carrier Act, 1935, is set out in brackets. New language substituted by the Transportation Act of 1940 is italicized.)

Accordingly, the definitions with which this paper is concerned, as presently contained in the act, are as follows, they being set forth below for ready reference:

"Section 203(a) As used in this part . . .

"(14) The term 'common carrier by motor vehicle' means any person which holds itself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of passengers or property or any class or classes thereof for compensation, whether over regular or irregular routes, except transportation by motor vehicle by an express company to the extent that such transportation has heretofore been subject to Part I, to which extent such transportation shall continue to be considered to be and shall be regulated as transportation subject to Part I.

"(15) The term 'contract carrier by motor vehicle' means any person which, under individual contracts or agreements, engages in the transportation (other than transportation referred to in paragraph (14) and the exception therein) by motor vehicle of passengers or property in interstate or foreign commerce for compensation."

The definition of private carrier is contained in paragraph (17) of § 203(a) of the act, being unchanged from the definition as set forth in the Motor Carrier Act, 1935. For ready reference it is shown below:

"(17) The term 'private carrier of property by motor vehicle' means any person not included in the terms 'common carrier by motor vehicle' or 'contract carrier by motor vehicle,' who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for the purpose of sale, lease, rent, or bailment, or in furtherance of any commercial enterprise."

[35] House Report No. 1217, 76th Congress, 1st Session, 16.

[36] Act of September 18, 1940, 54 Stat 898.

[37] "The conferees wish to make it plain that it is not their intention, by changing the language of paragraphs (14) and (15) of § 203, to change the legislative intent of the Congress one iota with respect to definition of common and contract carriers other than those performing pick-up, delivery, and transfer service." 86 *Congressional Record* 11546 (September 5, 1940).

[38] See also Senate Report No. 433 (Part I), 76th Congress, 1st Session; House Report No. 2016, 76th Congress, 3rd Session; House Report No. 2832, 76th Congress, 3rd Session.

[39] Act of August 9, 1935, 49 Stat 543.

[40] The question of classification as among these categories has not been of significance in railroad transportation because railroads are common carriers. While to a lesser extent the problems reviewed herein with respect to motor carriers have likewise been encountered by water carriers, limitations of time dictate the necessity of confining this paper to motor carriers.

[41] The issues in both the Lenoir Chair and Schenley cases arose in this manner. Brooks Transportation Co., Inc. *v.* United States (US Dist Ct 1950) 93 F Supp 517, affirmed *per curiam* (1951) 340 US 925.

[42] *E.g.*, Interstate Commerce Commission *v.* Pickard (US Dist Ct 1941) 42 F Supp 351.

[43] Lyle H. Carpenter, Common Carrier Application (1937) 2 MCC 85, 1 Fed Carr Cas paragraph 7099.

[44] Congoleum-Nairn, Inc. Contract Carrier Application (1937) 2 MCC 237, 1 Fed Carr Cas § 7101.

[45] D. L. Wartena, Inc. Common Carrier Application (1938) 4 MCC 619, 623.

[46] See Economy Oil Co. Contract Carrier Application (1938) 13 MCC 163; Durango Mercantile Co. Common Carrier Application (1939) 13 MCC 789; John H. Dull, Contract Carrier Application (1942) 32 MCC 158, 3 Fed Carr Cas paragraph 30,152; Interstate Commerce Commission *v.* Clayton (1942) 127 F2d 967; L. A. Woitishek, Common Carrier Application (1943) 42 MCC 193, 3 Fed Carr Cas paragraph 30,591; Williams Bros. Corp. Common Carrier Application (1945) 44 MCC 557, 5 Fed Carr Cas paragraph 30,967; Interstate Commerce Commission *v.* Tank Car Oil Corp. (USCCA 1945) 62 PUR NS 342, 151 F2d 834; Watson Manufacturing Co. Common Carrier Application (1949) 51 MCC 223.

[47] 32 MCC 158, 127 F2d 967.

[48] 2 MCC 237.

[49] 42 MCC 193; 151 F2d 834.

[50] Note 34, *supra*.

[51] 42 MCC 193.

[52] Coggins, "The Private Motor Carrier Definition of the Interstate Commerce Act, an Economic-Legal Battleground," (1950) 19 *George Washington Law Review* 1, 19.

[53] A. W. Stickle & Co. *v.* Interstate Commerce Commission (USCCA 1942) 128 F2d 155, certiorari denied 317 US 650, rehearing denied 317 US 707.

[54] Interstate Commerce Commission *v.* Jamestown Sterling Corp. (US Dist Ct 1945) 64 F Supp 121.

[55] Porter, "Federal Regulation of Private Carriers," (1951) 64 *Harvard Law Review* 896.

[56] Interstate Commerce Commission *v.* Clayton (USCCA 1942) 127 F2d 967.

[57] 128 F2d 155, 160.

[58] 42 MCC 193, 204.

[59] 93 F Supp 517.

[60] Lenoir Chair Company, Contract Carrier Application (1948) 48 MCC 259, and Schenley Distillers Corporation, Contract Carrier Application (1948) 48 MCC 405.

[61] Lenoir Chair Company, Contract Carrier Application (1949) 51 MCC 65.

[62] Brooks Transportation Co. *v.* United States, (1951) 340 US 925.

[63] See Wesley Frehner, Common Carrier Application, 8 Fed Carr Cas paragraph 32,242 (1951); George O. Winscot, Contract Carrier Application, 11 Fed Carr Cas paragraph 33,212 (1954); Taylor *v.* Interstate Commerce Commission (CA 9th 1953) 209 F2d 353, certiorari denied 347 US 952. In this case the appellate court, applying the primary business test, reversed the holding below to the effect that Taylor was engaged in contract carriage of lumber by motor vehicle. Interstate Commerce Commission *v.* Woodall Food Products Co. (DC Ga 1953) 112 F Supp 639, affirmed 207 F2d 517, certiorari denied 347 US 952.

[64] (CA 10th 1954) 213 F2d 300.

[65] The difficulties of drawing the line between private and for-hire carriers were cited in a case note published in the 35 *Minnesota Law Review* 596 (1951) 598:

"Often there are points of similarity in the business operations of private and for-hire carriers. In distinguishing between these two groups in border-line cases, the commission must be constantly wary of attempts of for-hire carriers to avoid regulation by making slight changes in the form of their operations so as to resemble private carriers. Thus, if a transporter, who otherwise appears to be a for-hire carrier, takes title to the goods while in transit, the commission may treat the purchase and subsequent sale as merely a device for obtaining transportation and hold him to be a common or contract carrier [citing cases]. It will be noticed from the discussion that the factors which the commission deems important are those which indicate whether the transporter is primarily concerned with *profiting* from a noncarrier business . . ."

[66] *Op. cit.* Note 55, *supra.*

[67] Klein, Contract Carrier Application (1944) 43 MCC 451.

[68] Butkus, Contract Carrier Application, 7 Fed Carr Cas paragraph 31,797 (1950).

[69] 42 MCC 193.

[70] Commission's statement to the Senate Small Business Committee, November 28, 1955, printed in February, 1956 (§ II), issue of *ICC Practitioners' Journal* 1, 15.

[71] 209 F2d 353; 112 F Supp 639, affirmed 207 F2d 517.

[72] Empire Box Corp. *v.* Sulzberger (1952) 104 F Supp 762.

[73] In its 67th Annual Report (November 2, 1953) at page 55, the commission said:

"ENCROACHMENT ON PUBLIC TRANSPORTATION ('BUY AND SELL' ACTIVITIES BY PRIVATE CARRIERS)

"Merchandising by motor truck, whether actual or pretended, over long distances is increasing to such an extent that it is becoming a major factor in the transportation of freight between distant points. Manufacturers and mercantile establishments, which deliver in their own trucks articles which they manufacture or sell, are increasingly purchasing merchandise at or near their point of delivery and transporting such articles to their own terminal for sale to others. Such transportation is performed for the purpose of receiving compensation for the otherwise empty return of their trucks. Sometimes the purchase and sale is a bona fide merchandising venture. In other cases, arrangements are made with the consignee of such merchandise for the 'buy and sell' arrangement in order that the consignee may receive transportation at a reduced cost.

"To an even greater extent, drivers of trucks engaged in transporting exempt commodities in one direction engage in similar transporting of general freight on the return trips. There are also a number of truck owners engaged in such so-called merchandising exclusively, transporting, in both directions, freight which they have purchased for sale at destination. Generally, the 'sale' price of the merchandise is the cost at origin plus an amount, equal to or slightly below the transportation charges of authorized carriers, either rail or motor. Usually it is difficult, if not impossible, for the commission to determine whether such transportation is a bona fide merchandising venture . . ."

[74] 68th Annual Report of the Interstate Commerce Commission (November 1, 1954). At page 97 it said:

"Some of the long-range problems involving regulation of the nation's motor carriers which we discussed in our last report received continuing consideration during the year. One of them involves determination of the line of demarcation between (1) contract carriers and common carriers and (2) regular-route and irregular-route carriers. Another involves the increase in transportation being performed by shippers in equipment which they lease from vehicle owners, and by use of the 'buy and sell' method of operation. The latter method involves execution of a bill of sale intended to establish that the property being transported belongs to the owner of the vehicle transporting it and that the transportation, therefore, is private carriage. This method has caused much concern within the regulated transportation industry, and presents a difficult question for us. In fact, both of the methods result in the performance of unlawful for-hire transportation by the vehicle owners, in many cases."

PART II *of this article will appear in the next issue of the* FORTNIGHTLY.

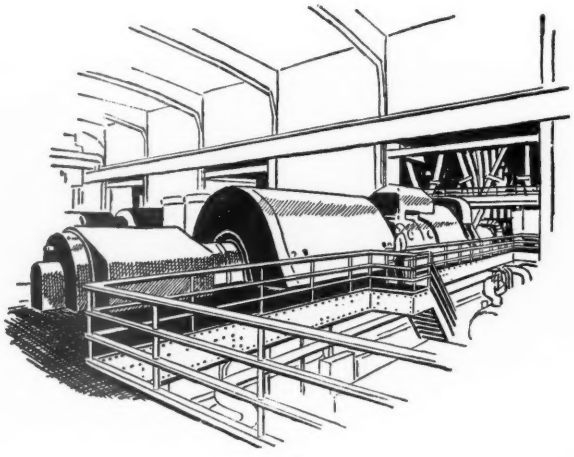
Power Shortage in the Pacific Northwest

Commercial electric companies in the Pacific Northwest area have the know-how, the credit, and the continuity of management to carry out a long-range program of power development to provide for their future needs. They have demonstrated through operation of the Northwest Power Pool that they can work in harmony with each other and with government power agencies.

By ERNEST R. ABRAMS*

Between the end of 1938 (during June of which year the first generating unit at Bonneville dam was placed in operation) and the close of 1955, the publicly and privately owned electric utilities of Oregon, Washington, Idaho, and Montana increased their combined generating capacities by 5,802,987 kilowatts or 297.3 per cent. During the same period, the electric power and light industry of the entire United States increased its capacity by 78,040,620 kilowatts or 214.8 per cent. Despite this sharp increase in production facilities, the managements of most publicly and privately owned electric supply systems of the Pacific Northwest predict a serious power shortage within the next six to eight years, unless construction of additional capacity is started immediately. Who will build the substantial amount of additional capacity within less than a decade and how will it be financed?

The 1955 advance program of the U. S. Columbia river power system, prepared by Bonneville Power Administration, states that nearly 5,500,000 kilowatts of capacity were added by electric supply systems in the area served by members of



* Economist and author of business articles, resident in New York, New York. For additional note, see "Pages with the Editors."

the Northwest Power Pool between 1940 and the end of June, 1955, of which roughly 3,500,000 were installed in federal generating stations and 2,000,000 in the plants of private power companies, municipalities, and public utility districts.

BUT demand for electric energy has been growing at a faster pace than additions to generating capacity. Although nearly 3,000,000 kilowatts of additional capacity are under construction by the federal government for the U. S. Columbia river power system at McNary, The Dalles, Chief Joseph, Ice Harbor, and smaller projects, and almost 1,000,000 kilowatts are under construction or have been scheduled by other utilities in the Northwest Power Pool area, this boost in capacity will be insufficient to avoid a power shortage in the early 1960's.

More than that, BPA estimated that 9,000,000 kilowatts of added installed capacity will be needed by 1975 to meet the region's minimum demands and this need would be higher if the electroprocess industries were to secure all the power they would require for future expansion. The cost of creating generation and related transmission facilities to meet prospective demands on a minimum basis is placed at $4.5 billion, in addition to the $1 billion needed to complete all facilities—federal and nonfederal—now under construction.

Furthermore, if the long-range power requirements of the Pacific Northwest are included, another $1.5 billion would be needed for the planning and design of additional projects to keep pace with load growth. Altogether, BPA has estimated that a total further investment of $7 billion will be needed by 1975, if economic and industrial expansion of the region is not to be retarded.

THE 1955 advance program places the installed generating capacity of the ten publicly and privately owned electric utilities which are members of the Northwest Power Pool at 7,691,000 kilowatts on June 30, 1955, of which almost 3,000,000 were added since 1950—the equivalent of about one Bonneville plant each year. Around 90 per cent of existing capacity is installed in hydro plants and the balance in thermal stations. Of the total capacity of the region, U. S. Columbia river power system accounted for 3,589,000 kilowatts or 47 per cent, the private power companies 2,768,760 kilowatts or 36 per cent, local publicly owned utilities 1,230,560 kilowatts or 16 per cent, and the Bureau of Reclamation plants, which are not a part of the U. S. Columbia river power system, 102,680 kilowatts or one per cent.

Stated in another way, about 80.4 per cent of the total installed capacity of the Northwest Power Pool members was owned by the West group (to be defined later) and the balance by the East group. The ten pool utilities operated a total of approximately 17,000 miles of transmission lines, of which 6,700 miles or almost 40 per cent were owned by the Bonneville Power Administration. About 4,000,000 kilowatts of new capacity are now under construction at federal and nonfederal projects, which will boost total capacity to about 11,000,000 kilowatts upon completion.

THE Northwest Power Pool, a voluntary association, is composed of ten publicly and privately owned electric utili-

ties, which are divided into two groups. The West group is comprised of the U. S. Columbia river power system, operating in Oregon, Washington, Idaho, and Montana; the city-owned systems of Seattle and Tacoma, operating in Washington; Puget Sound Power & Light Company, also operating in Washington; Washington Water Power Company, operating in Washington, Idaho, and Montana; Pacific Power & Light Company, operating in Oregon and Washington; and Portland General Electric Company, operating in Oregon. British Columbia Electric Company is also a member of the West group, but its participation is confined largely to feeding surplus power to other group members. The East group is comprised of Idaho Power Company, operating in Idaho and Oregon; The Montana Power Company, operating solely in Montana; and Utah Power & Light Company, operating in Utah

Bonneville Power Administration is the marketing agency for power produced at federal plants, all of which are hydro stations and which generated 68 per cent of the total energy supply of the Pacific Northwest during the June, 1955, year, or 23.3 billion kilowatt-hours. The maximum coincident peak demand during this period was 3,651,000 kilowatts and total capacity was 9,809,250 kilowatts. Due, however, to variations in stream flow, the firm capacity of the federal plants was only 6,698,000 kilowatts or 68.2 per cent of total capacity.

During the June, 1955, year, BPA sold slightly more than 21,823,000,000 kilowatt-hours at wholesale or retail to 119 customers, of which 80 were publicly owned electric systems, 18 were industrial companies, 12 were federal agencies, and nine were privately owned utilities. BPA's total operating revenues for the twelve months were $52,066,482, of which 33.81 per cent was received from publicly owned distributing systems, 32.48 per cent was received from the aluminum industry, 19.06 per cent from private power companies, 13.10 per cent from other industries, and 1.55 per cent from miscellaneous sources.

Since the output of the federal plants marketed by BPA is generated with falling water, power is sold on both a firm and an interruptible basis, with firm power commitments limited to capability under water conditions in 1936-37, the minimum stream-flow year of record. Interruptible power is sold to industrial consumers, who are willing to risk having deliveries curtailed during periods of adverse water conditions.

So much for the picture of power resources in the Pacific Northwest. Bon-

ZINDER ESTIMATE OF PACIFIC NORTHWEST ENERGY DEFICIT
THOUSANDS OF KILOWATTS

Year	*Total Energy Loads*	*Primary Energy Supply*	*Energy Deficit*
1960-61	6,110	5,710	400
1961-62	6,445	5,820	625
1962-63	6,725	5,865	860
1963-64	7,080	5,865	1,215
1964-65	7,435	5,865	1,570
1965-66	7,815	5,865	1,950
1966-67	8,220	5,865	2,355

neville Power Administration has estimated that by using all resources available to the West group companies of the Northwest Power Pool, including high-cost steam generation and imports from both the East group and British Columbia, all firm power loads can be served through 1960-61 under critical water conditions. But beginning with 1961-62 under adverse hydro conditions, the area served by the West group will start experiencing a rapidly rising power deficiency, reaching 1,335,000 kilowatts in 1965-66. Furthermore, this pessimistic estimate is confirmed in the main by independent experts.

IN its report in connection with the recent financing of construction of the Priest Rapids project on the Columbia river of Public Utility District No. 2 of Grant county, Washington, H. Zinder & Associates, consulting engineers, estimated that the total energy requirements of the major electric utilities in the Pacific Northwest will exceed available supplies under critical water conditions beginning in 1960-61, based on the following assumptions:

(1) The supply estimate reflects the output from 13 new hydroelectric generating plants now under construction and the output of 349,000 kilowatts of primary power from the Priest Rapids plant, with aggregate name-plate rating of approximately 3,600,000 kilowatts;

(2) four-hundred and twenty-five thousand kilowatts will be available from existing fuel-fired generating stations, most of which were constructed before 1930 and almost all of which are high-cost producers by modern standards; and

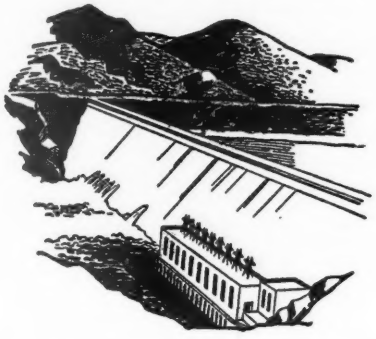
(3) approximately 600,000 kilowatts of industrial loads now being served under interruptible contracts have been included in the estimate of total requirements.

The detail of the Zinder estimate is shown in the table on page 755.

AGAIN, in his March, 1955, report to the Puget Sound Utilities Council Jack D. Stevens, consulting engineer of Seattle, in commenting on the power supply situation facing the West group members of the Northwest Power Pool, estimated on the basis of critical water conditions and the minimum load level that all firm loads could be served through 1962-63 and that total area loads, including interruptible customers, could be served through 1961-62, but only if interruptible customers were willing to use substantial amounts of high-cost steam-generated power.

In more detail, he estimated that under critical hydro conditions deficiencies in firm power supply between September 16th and April 15th would range from 260,000 kilowatts in 1961-62 to 830,000 kilowatts in 1963-64.

But if the interruptible load were included, he estimated that serious deficiencies in the area power supply under adverse water conditions would range from 210,000 kilowatts in 1959-60 to 1,300,000 kilowatts in 1963-64. Under the same assumptions but with median water conditions, he estimated that all firm loads could be served between September 1st and March 31st of each year through 1963-64. But the supply to meet the total area load would show a deficit ranging from 80,000 kilowatts in 1962-63 to 370,000 kilowatts in 1963-64.



A Long-range Power Program

". . . the private utilities of the Pacific Northwest have the know-how, the credit, and the continuity of management to carry out a long-range program of power development to provide for their future needs, and they have demonstrated through operation of the Northwest Power Pool that they can work together in harmony. Unfortunately, they require permission from both the federal government and their state governments before they can proceed. Federal power proponents in Congress use every device to block Federal Power Commission permits, while special local interests attempt to prevent state approval."

ALL power produced at federal plants in the Pacific Northwest is sold by the Bonneville Power Administration under the direction of §4(a) of the Bonneville Project Act of 1937, which reads:

> In order to insure that the facilities for the generation of electric energy at the Bonneville project shall be operated for the benefit of the general public, and particularly of domestic and rural consumers, the Administrator shall at all times, in disposing of electric energy generated at said project, give preference and priority to public bodies and co-operatives.

Under the terms of this section of the act, publicly owned electric systems have first call on the power BPA has for sale. And since the private power companies serve more than half the domestic and rural consumers of the Columbia river basin, it might be assumed they would rank next in line to preference customers in the right to buy federally generated power from BPA. In practice, however, they are outranked by the aluminum industry and are about to be placed at the bottom of the list of customers permitted to buy power produced at federal generating plants.

Bonneville Power Administration announced in its 1955 advance program that "deliveries to the private utilities from plants in operation and construction will decline steadily after 1961-62 under mini-

mum year hydro conditions as public agencies—the preference customers—absorb nearly all the generation from the federal plants now under construction." When it is realized that Portland General Electric now purchases over 70 per cent of the power it distributes from the Bonneville Power Administration, it can easily be appreciated what degree of consternation this condition can raise with the private power companies of the area.

IT is difficult to predict with any certainty just who will build and finance the additional generating capacity that will be so badly needed in the Pacific Northwest in future years, if economic and industrial expansion is not to be stymied. Before 1953, the New Deal and the Fair Deal were public power minded and sought opportunities for creation of vast power projects with the funds of the taxpayers. But the present administration has not looked with favor on this variety of federal activity. In fact, in his Budget Message of January 17, 1955, President Eisenhower said:

> Achievement of the resource development basic to the economic progress and security of the nation requires encouragement of local public and private initiative and, where federal participation is necessary, emphasis on the partnership aspects of essential co-operative arrangements with state and local governments or with private enterprise. To the greatest extent possible, the responsibility for resource development, and its cost, should be borne by those who receive the benefits.

This proposal, however, was immediately opposed by public power advocates and the Federal Power Commission's permit to Grant county, Washington, for construction of the Priest Rapids and Wanapum dams on the Columbia river is the only project so far approved under the partnership arrangement. Fortunately, since Congress must not only authorize federal projects but appropriate the funds necessary for their construction, there is little likelihood of further major federal power development in the Pacific Northwest, unless the present administration should be replaced at the November elections.

SOME of the larger cities in the Pacific Northwest are not only willing and able to build additional generating capacity but they have sufficient credit to finance construction. They have, however, encountered much opposition to their plans from federal power exponents in Congress and from agencies within their own states. Despite having first call on federally generated power marketed by the Bonneville Power Administration, the three largest city-owned electric systems—those of Seattle and Tacoma, Washington, and Eugene, Oregon—have made repeated attempts to build enough generating capacity to assure an adequate electric power supply for the future.

Then, too, some of the public utility districts in Washington are constructing additional generating capacity far in excess of their immediate needs and have been able to finance them through power sales contracts with cities, other PUD's, and private utilities. As an example, Grant County (Washington) Public Utility District No. 2 recently sold

$166,000,000 of 3⅞ per cent bonds, due in 2005, to the public through underwriters to finance construction of its Priest Rapids project. Of the 630,800 kilowatts of firm power to be produced, the Grant County Public Utility District will retain only 230,242 kilowatts or 36.5 per cent for its own use, while four private power companies have contracted to take 264,305 kilowatts or 41.9 per cent and eight public utility districts or cities have agreed to take 136,253 kilowatts or 21.6 per cent, with all contracts running through 2005 or for roughly fifty years.

FINALLY, the private utilities of the Pacific Northwest have the know-how, the credit, and the continuity of management to carry out a long-range program of power development to provide for their future needs, and they have demonstrated through operation of the Northwest Power Pool that they can work together in harmony. Unfortunately, they require permission from both the federal government and their state governments before they can proceed. Federal power proponents in Congress use every device to block Federal Power Commission permits, while special local interests attempt to prevent state approval.

Informed observers in the Pacific Northwest are convinced that if public power advocates in Congress could be silenced and the only dealings necessary with Washington involved obtaining FPC approval, the cities, the PUD's, and the privately owned utilities, individually or in combination, could provide all the generating capacity the Pacific Northwest ever will need.

And electric consumers of the region would appear to approve power production and distribution by a combination of public and private agencies. In June, 1956, Elmo Roper and Associates made a survey of consumer opinion in the Puget Sound-Cascade region, admittedly only a part of the Pacific Northwest, for Puget Sound Power & Light Company. Among the points to emerge from the survey were that (1) by a margin of nearly 3 to 1, people in the region prefer the partnership concept of co-operation between public and private power to either alternative of all public or all private power, and (2) by a margin of better than 2 to 1, folks in the Pacific Northwest reject the idea of federal control of their electric utilities.

Debt *versus* Taxes

"THE plain truth is that both the debt and taxes are too high. If the members of Congress and the administration would worry less about compensatory economics—the 'right' time to cut taxes—and more about that fact, the cost of government would be going down instead of up, and in due time there would be a surplus big enough to provide both debt and tax reduction.

"Under Secretary [of the Treasury] Burgess had some recent advice for the American people . . . 'I think in the long run this country would make faster progress if we saved a little more and spent a little less.' This country would indeed make faster progress if the government would just heed its own advice."

—EDITORIAL STATEMENT,
The Wall Street Journal.

Corporation Policy Goes to School

The appearance of telephone company officials before students during an economic college course session on utility corporation policy and management was an interesting development in public relations technique. Both faculty members and telephone company officials tried to make this a discussion course, not a lecture series. Classroom participation was stressed.

By JOSEPH K. GILBERT*

From the back of the large college classroom came a student question. Would the scheduled new telephone plant be needed as soon as it was built or be partially idle, waiting for growth to catch up? The question, one of several of equal caliber, was directed at a quartet of business leaders by University of Washington business administration students. These were students learning how management operates Pacific Telephone.

Moderator George M. Dean, vice president and general manager of the company's Washington-Idaho area, answered the question. Fellow panel members added their comments. On his right was William Street, president of a leading Pacific Northwest department store, Seattle's Frederick & Nelson, who pioneered a shopping center in the city under discussion, suburban Bellevue. On his left sat Don Wageman, chairman of the executive committee, Seattle-First National Bank, and B. B. Ehrlichman, Seattle, chairman of the board, Pacific Northwest Company.

All three were there as members of the company's advisory council, a quasi board of directors which works with management in Pacific Telephone's Washington-Idaho operating area to consider plans and allocate construction ex-

* Member, public relations staff, Pacific Telephone and Telegraph Company, Seattle, Washington. For additional personal note, see "Pages with the Editors."

penditures. As such they were well informed on company problems and operations. And a vast backlog of financial experience flavored their answers with the hard facts of business life.

They appeared before students during one session of a unique college course in utility corporation policy and management. This was but one of ten class periods conducted by Pacific Telephone during the winter academic quarter of Washington's 1955-56 school year.

SOMETIMES seeds of misconception, particularly about big business, grow without encouragement, like noxious weeds. Anything might be worth while that dispelled some of the erroneous ideas which, once they flower, spread these seeds to new fields. Besides awarding scholarships and granting research funds, why shouldn't business bare its soul to more people?

Why not do it for young people who would be tomorrow's executives and whose youthful enthusiasm today could be beneficially contagious and apostolic? Some Seattle telephone people thought affirmative answers were in order.

Several methods of doing this were discussed and discarded before the college class approach was agreed upon. University of Washington people were told of an earlier, but different, class on telephone operations given at the University of California. College officials, after consideration, invited the company to conduct a course for upper division and graduate students on the Seattle campus. For nearly a year following this invitation a faculty committee and company leaders met periodically to explore its possibilities. Recognizing kinks inherent in such a venture, first discussions were on the basis of perhaps twenty-five students. This grew to seventy-six by class time because several instructors wanted their classes included.

FROM the first, faculty members insisted and telephone people concurred that this should be a discussion course, not a lecture series. Classroom participation was sought and as it worked out readily obtained. The original premise, that it should be a course on policy making and not a review of telephone operations, never changed.

Once academic agreement had been reached, selling top management on participation began. The right kind of participation had to be sold—typical discussions on actual decision making. Support grew as the framework of a course began to take shape. Top officials accepted the challenge, jotted down notes and outlined material, much of it out of hours.

Determining how to present the course was of prime importance. There would be ten classes, each an hour and twenty minutes long. In addition, students would tour the company's main equipment building and its area accounting headquarters in downtown Seattle. This would provide them with some background on operating procedures; *i.e.*, handling calls, equipment operation and maintenance, and revenue and disbursement accounting.

Three main objectives were set forth: (1) to give the students an insight into the company's policy and decision-making activity; (2) to demonstrate the company operates in the public interest, under principles and policies fair to customers, owners, and employees; (3) to answer all questions asked, not only to clear up foggy

The Student Urge to Ask Questions

"COVERING the wealth of available material while still allowing active student participation presented an interesting paradox. Initially it was decided that half of the period could be for presentation, the other half for discussion. Such carefully drawn plans were decimated during the first session. Students preferred to cut in with questions as the speaker progressed. This practice continued throughout the course and speakers shifted with the tide, covering their material through answers to questions. Planning was of paramount importance to insure full utilization of the ten class periods."

suppositions, but to help equip students for a business career.

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Planning was of paramount importance to insure full utilization of the ten class periods. For example, it was agreed that charts and illustrations should be used where practical. But in a large classroom they are sometimes difficult to see. After considerable discussion a satisfactory solution was reached. A hard-cover, loose-leaf style, indexed notebook was given each student. Before class all were handed a package of materials which included the speaker's charts, his biography and his picture, and his notes. These became a permanent textbook, with space for the students' own notes. And this proved satisfactory despite the theory that a speaker

should never hand out materials before he begins.

THE course was flexible enough to allow improvements as it progressed. Later speakers, preparing material, drew on the experience of earlier ones. Then, too, a weekly luncheon meeting attended by faculty members, the day's speaker, and those few telephone company representatives handling administrative details resulted in a free flow of ideas and several important decisions for improvement along the way. Another important point was refusing to let a lot of company people attend as observers or to let operating department heads participate. Such resistance insured an emphasis on policy with only administrative heads participating. At course's end though it was agreed that each speaker should have attended an earlier session to get a better feeling of his audience and to erase any qualms.

Major company undertakings were probed from a how-it-was-decided approach. For example, a recent decision to build a three-story addition to one of its Seattle buildings, rather than lease from a private owner or builder, was reviewed to include factors management considered. A major line extension project into a still undeveloped region of the vast Columbia basin irrigation project in central Washington was studied. Students saw, in retrospect, how management weighed pros and cons of an investment which would have only limited return for years. And they gained an insight into a basic utility company problem—to prophesy, engineer, and build plant in order to deliver service when demand arises.

Speakers covered a variety of subjects. Vice President Dean led with a discussion of Pacific Telephone's organization and its operating methods. The assistant vice president, rates and regulatory matters, discussed policy making in a regulatory climate. From the personnel group came an outline of personnel and employment ground rules. A representative of the secretary-treasurer's office followed with money management, financing, and fiscal policies.

A session was devoted to the commercial or customer contact activities of the business to indicate use of management tools, such as customer surveys and interviews. The company's advertising program and its public and employee information policies were described. Besides the advisory council session, one meeting was set aside for questions. Students submitted them in writing and a group of company leaders appeared on the final day to answer as many as time allowed.

What questions some of them were! Here are samples of the barbed ones: Does the company really believe its objective is to put public service ahead of the profit motive? Is it company policy to make that product which the customer likes or to make the customer like the product that it produces? What were the ultimate goals of your company in presenting this program at the university? Since the company advertises itself as "a good place to work" do the attitude surveys covering both the management and nonmanagement groups bear this out? Do office employees have any kind of quota or output scale that they must attain during the day?

ANALYZING results after the course ended, Pacific Telephone could score numerous benefits. Suspicions about

business which some students obviously brought to class were allayed, mostly by frank answers to their questions. A fine working relationship was established with the university. Company people were required to closely reappraise their activities. An excellent file of information, fully illustrated, was available for additional use. And a nucleus of young businessmen and women left the course with a better appreciation of business' problems and progress. An incidental, but flattering, result was the appearance of several students before the company's college recruiting people seeking a job in a company they had come to know rather well.

One student perhaps summed up the experiment for his class members when he said the approach to the subject was good and made the course more interesting than most classes. His only criticism was that so much material was presented in each class that time for questions suffered. Experience or more planning could help this. He added that some students got discussions off the course. It requires a skillful speaker to navigate that hazard.

AN unsolicited compliment was overheard by a company man one evening in a Seattle restaurant. Two students, obviously from the class, were earnestly discussing some business theories. One cinched the argument and closed the matter by declaring: "Well, that isn't the way George Dean would do it!"

Many a teacher will confess that he learns as much, if not more, than his pupils. Pacific Telephone learned a lot by conducting this course. For those who would try something similar, the key to success is planning and preparation. Refinements could still be added to this course despite its flexibility along the way. Even so, all who took part would likely concede that it is a healthy thing for all concerned when corporation policy goes to school.

Does Smearing Business Make Votes?

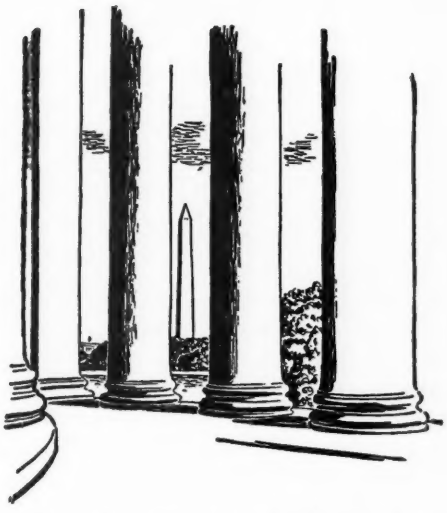
"AS *of now, it is debatable whether there will be any net gain of votes from attacking the institution of business. There is obviously a time lag in the thinking of demagogues who expect the sure-fire tactics of the Great Depression to be successful in good times.*

"But apart from short-term considerations, every responsible businessman, who believes in the American free-choice system, has a public obligation to disseminate the truth as a means of strengthening the United States of America in its competitive coexistence with militant Communism.

"Whether from malice or ignorance, the demagogue who strikes at competitive voluntary enterprise is in reality hitting at the foundations of a free society, as contrasted with a police-state dictatorship. Thus executives, who, in the phrase used in a brochure put out by this writer back in 1938, undertake to sell the business and the business system as well as the product are on the side of the angels, and are firming up the underlying strength of the free world."

—M. S. RUKEYSER,
Columnist.

Washington and the Utilities



In the Wake of the Panhandle Decision

BOTH the regulators and the regulated as as well as gas consumer interests are puzzled over what happens now that the U. S. Supreme Court has refused to review the District of Columbia circuit court of appeals decision in the Panhandle Eastern Pipe Line Case. This case, which was reported under the title of City of Detroit, Michigan *v.* Federal Power Commission (1955) 11 PUR3d 113, is so important that additional steps may still be taken to persuade the highest court to reconsider. But on the basis of past performance, such reconsideration by the Supreme Court (particularly on a negative action such as its denial of certiorari) is exceedingly rare and the chances must accordingly be classified as slim.

Probably it was because the lower court had merely, in effect, asked the FPC to do its homework over again, and did not finally determine the basic issues involved in the case, that the Supreme Court decided not to review the lower court's action at this time. Be that as it may, the Supreme Court's failure to review leaves standing not only some rather ambiguous court-made guides for the commission to follow, but also what some observers regard as some rather mischievous dicta by Circuit Court Judge Fahy.

The over-all effect of the lower court's decision was to set aside an FPC rate increase for the Panhandle Eastern Pipe Line Company, which had been computed on the basis of fair field price of gas rather than the conventional cost of production formula which the FPC has used for rate making in other regulatory fields.

But the circuit court did *not* say that the FPC necessarily had to use a production cost rate base. It did say that the FPC should reconsider the case and make it clear whether and how a departure from cost base rate making was justified.

THERE have been somewhat conflicting reactions to the U. S. Supreme Court's refusal to disturb this circuit court of appeals decision. In some respects, it would seem to restrict the FPC's discretion in choosing formulas and following its own procedures for rate making under the Natural Gas Act. On the other hand, it probably strengthens the hand of the FPC in calling upon gas producers, for instance, to develop and submit competent produc-

tion cost evidence in rate cases. Up to now, producers have tended to hesitate and delay, or make at most only perfunctory passes at production cost base evidence.

Until the veto of the Harris-Fulbright Bill last winter, this stalling could be understood as a sort of holding operation indulged in with the hope that Congress would soon rescue the producers from the necessity of having anything to do with the FPC. When that hope vanished, in the light of the veto and other complications prejudicial to congressional legislation, there was still the hope that the highest court would review the Panhandle decision and uphold the right of the FPC to dispense with cost base evidence for producers, if it felt like it. And most producers were hoping that the FPC would feel like it, or at least would not demand serious and comprehensive production cost data.

So now that hope would seem to be glimmering, although the FPC may yet decide the Panhandle Case (on remand) on some other basis than production cost.

WHAT hope is left for the producers who want to avoid the heavy and complicated burden of developing production cost evidence? Well, there is still the possibility of one last try for congressional legislation to amend the Natural Gas Act. As a matter of fact, regardless of the outcome of the forthcoming elections, it seems to be assumed by Congressmen from the gas consumer states that another strong effort would be made for a Natural Gas Act amendment. And there are those who say that the refusal of the U. S. Supreme Court to review or reverse the lower court in the Panhandle Case makes it all the more necessary for Congress to consider such legislation.

This line of argument is that the Natural Gas Act should at least be amended so as to clarify or permit FPC regulation of gas production to develop along practical and feasible lines. The lower court's decision *did* appear to interfere, to some extent, with the full discretion of the FPC to use any reasonable formula or procedure it deemed desirable. Congressmen from gas-producing states are likely to point to this decision as an argument that even though the FPC wants to do an effective job of regulating producers, it is likely to be hamstrung by court-made restrictions.

THE unnecessary dicta by Judge Fahy in the lower court's decision is another reason why gas pipelines and gas distributors as well as gas producers might think some clarifying legislation would be in order. Judge Fahy's dicta was to the effect that the Natural Gas Act is primarily for the protection of consumers and the insurance of lowest possible rates—an interpretation which some experts insist is not justified by any language or reasonable construction of the Natural Gas Act in its present statutory form.

Of course, there is always a tendency to read too much meaning into a purely negative action of the U. S. Supreme Court; namely, a denial of review. After all, the lower court simply ordered the Panhandle Case to be reheard by the FPC for more explicit findings and determinations as to the cost price factor. There was no final court-made policy on this point.

One other result of the highest court's action may well be the tightening by the FPC of procedural regulations on gas producers. One or more general orders, spelling out accounting, reporting, and rate case procedures for gas producers, may be considered soon by the FPC, in order to clear up the uncertainties of its present rather vague and incomplete procedural rules for producers.

Last Round in the Hell's Canyon Fight?

AFTER years of fighting over the Hell's Canyon hydro power sites on the Snake river between Idaho and Oregon, the groups that want one big government-built dam have been turned down again. The U. S. circuit court of appeals for the District of Columbia has rejected their move to halt construction under permits already granted to the Idaho Power Company, which would use its own money to build three dams instead of one.

Before that, the Federal Power Commission held hearings and studied expert testimony for over a year before approving the application of the private developers. It was the FPC's decision that was up on appeal now. In Congress this year, the greatest pressures were brought to bear in both houses to get the FPC's ruling set aside, and several hundred millions of taxpayer dollars—taken from every state in the Union—appropriated for the government project. That failed. In fact, the Democratic Senate specifically defeated such a proposal by a lopsided vote of 51 to 41.

But instead of accepting the fact that private industry is ready to go ahead and develop the water power now going to waste — and badly needed by the Pacific Northwest — the public power advocates plan to take the case to the U. S. Supreme Court. That could mean another year or two, although it probably won't. On the strength of that court's decision in the very similar Roanoke Case in 1953 (on which the Hell's Canyon decision relied very heavily), the highest court is likely to make short shrift of any further appeal.

The record is clear enough. Idaho Power Company's three dams will provide as much power as the single proposed federal dam; perhaps more. The construction cost will be less, which means that the rate for produced power can be less. A federal Hell's Canyon dam might sell its power at the same price or cheaper, but only because it would be almost tax-free.

JUDGE Miller's opinion noted that Congress had shown little disposition to authorize the federal development during the last six congressional sessions. He pointed out that FPC had to choose "between a $400,000,000 plan, which nobody was offering to undertake, and another comprehensive development for which private capital in the sum of $175,000,000 is immediately available." He rendered the opinion of the court that the three-dam proposal and the single high dam suggestion were "equally comprehensive as to the achievement of public purposes."

One interesting observation of the Miller opinion is worth special notice. The circuit court of appeals refused to consider the contention that lower interest rates available to the federal government and its freedom from taxation would lower construction costs on a government project. Judge Miller said if this were the criterion, federal development would invariably be preferable and the commission's authority to issue licenses to private applicants could never be exercised without first recommending the proposals for federal construction and waiting for two years to see whether Congress would authorize the work.

Now that the FPC examiner, the FPC, and the circuit court have all unanimously ruled in favor of the Idaho Power Company licenses, and the U. S. Supreme Court has refused a temporary stay of construction, further efforts of the government ownership bloc to pursue this litigation in the highest court are not getting very much serious attention. The lower court's decision may conceivably have an

effect in the current Senate campaign in Oregon where proponents of the high federal dam have been contending that the FPC acted unlawfully — a charge which Judge Miller's opinion expressly rejected.

The Atom—Shackled or Harnessed?

As election day approached, those debating the status of American nuclear power stepped up their campaigns. In the process, the public had a chance to take a look at some recent information on progress made until the present time. After Queen Elizabeth of England dedicated the Calder Hall nuclear power project, marking the advent of commercial atom power in Great Britain, and after many critical speeches on the part of the Democratic presidential and vice presidential candidates as to the status of the American efforts in this direction, AEC Chairman Strauss attempted to counteract attacks on his agency by disclosing a tabulation of nuclear reactors built, being built, or planned in the United States.

Under the caption of "high-temperature, power-producing reactors," the official list showed four civilian power experimental reactors completed, but later dismantled. Of this same type, four reactors are both completed and still in existence. At the moment, five more are being constructed, and an additional four are planned. All these are small, experimental reactors. As to the larger, "full-scale civilian power reactors," AEC disclosed these figures: It said three are under construction and 14 are planned for U. S. locations — five more are slated eventually for overseas locations. Thus, if all reactors suitable for power production are counted — both civilian and military — the impressive totals obtained are nine high-temperature reactors completed and in being, 22 under construction, and 47 planned. Over all, there will be a total of 83 reactors capable of producing power, though not all on a full-scale basis.

Other information on progress made in developing atom power reactors was disclosed by Lieutenant General Leslie R. Groves, USA (Ret.), who was the former military director of the original atom bomb project. His remarks were made at the fifty-ninth annual convention of the United States Independent Telephone Association in Chicago last month.

General Groves made a general survey of progress in nuclear developments throughout the world, but he warned that available data on projects in the Soviet Union were quite unreliable. He did not minimize how important it is for the United States to maintain its leadership in this field. But at the same time, he said he felt confident that such leadership is now being maintained by the present Atomic Energy Commission. He warned that the American people should "keep a sharp eye on those domestic politicians who bend their efforts towards keeping private industry out of the atomic field." Groves said the best way to keep American leadership in this area is to rely on private industry to carry on such programs as are practical and economical in terms of our present power needs and resources. "Certainly," he added, "a big government construction program . . . would inevitably put atomic development in the middle of the age-old public-private power fight." The General said that this would be "a backward move which might well lead to disaster."

According to the General's own tabulations, at least 15 nuclear reactors of various types have been seriously proposed in the United States, varying from a few thousand to 200,000 kilowatts in capacity.

Telephone and Telegraph

Independents Convene in Chicago

THE communications industry has "proof positive" that it will continue to grow, that current types of service will be improved in their usefulness, and that new forms of communications services will become available. Those attending the fifty-ninth annual United States Independent Telephone Association convention in Chicago, October 15th to 17th, heard such encouraging remarks from so many speakers that it must, necessarily, have warmed their hearts.

Association President Merle M. Hale, vice president of Lincoln (Nebraska) Telephone & Telegraph Company, estimated that before the end of this century more than 100,000,000 telephones will be in service in the United States. A great many of the sets would be in color, he said, and an extension in each room would be as commonplace as an electric outlet by each chair. Otherwise, equipment will probably function in millionths of a second, instead of thousandths; television and other forms of visual communications will be widely used in industry; use of facsimile over telephone circuits will be extended; higher speed teletype transmission will be put in commercial service, and data transmission over regular telephone circuits will be used generally, permitting efficient centralized bookkeeping by national concerns.

Mr. Hale pointed out that USITA's 4,700 companies, through almost 11,000 exchanges, operate nearly 9,000,000 telephones which serve two-thirds of the geographical United States and its territories. With the Bell system, these companies interconnect more than 56,000,000 telephones at home and 40,000,000 more, abroad.

The speaker admitted that the number of independents has been shrinking in recent years, as the result of consolidation and merger in situations where the small company has found it uneconomic to operate as a separate unit. He felt this trend might continue. Four thousand, out of 4,700, independents have less than 1,000 stations, he said. "The small telephone company . . . can remain a going concern and a prosperous unit of the telephone industry . . . only if it installs modern plant and equipment and only if it provides high-quality service," and "in some cases it is a big 'if'!"

THE report of USITA Executive Vice President Clyde S. Bailey followed the generally optimistic tone set by the convention with the remark that so long as it is the natural desire of people to live

where there are trees, there will be a favorable impact upon telephone development in the service areas of independent telephone companies. He noted that independents now serve mainly small-town and rural areas, where the service growth possibilities are enormous.

Often these companies operate on the fringe of larger communities that are bursting at the seams, he added. This plus the huge expansion in population means more telephones, and especially more for the independents.

USITA has had considerable success in presenting the industry's case to legislators in Washington in the last year, Bailey said.

Power Radio Service

RADIO communications experts of utilities other than telephone companies have not looked with favor on the recent action of the FCC in allowing telephones to share radio frequencies in the band heretofore reserved for utility intraindustrial communication services. This is the band from 450 to 460 megacycles. The National Committee for Utilities Radio has asked the commission for a rehearing and stay of its order, dated September 21st (Docket No. 11,435). This specifically authorized communications common carriers (mostly telephone and telegraph companies) to share, for the first time, in a band of frequencies known under the FCC's allocation label of Power Radio Service. The order will go into effect automatically on October 29th, unless FCC can be prevailed upon to change its mind before then. It should be pointed out, however, that the commission, in its report which accompanied the order, limited telephone companies utilizing these frequencies in the future to confining such use to construction and maintenance activities. No revenue service may be contemplated.

FCC based its order on the position that it does no more than allow the telephone companies to make the same use of these frequencies as other utility industries. Gas, electric, water, and steam utilities (whether business-managed or government-operated) have made use of these frequencies for radio and microwave intrasystem communications in connection with their own industrial operations. Such service has facilitated work on pipelines, transmission systems under construction, maintenance, and emergency situations. The National Committee for Utilities Radio objected to extending the same possibilities to the telephone-telegraph group, which has now been authorized to use six frequencies in the Power Radio Service band, on the ground that it will result in an overcrowding of the particular radio spectrum. This particular spectrum segment was contended to be already unduly congested. The committee requested the FCC to create a new band for the telephone-telegraph group, even though it would be restricted to nonrevenue use.

REA Survey Results Announced

REA disclosed the results of a survey it recently made of the opinions expressed by independent telephone people in appraisal of the rural telephone loan program. The questionnaire sent out to elicit opinion from the industry was drawn up early this year by a group of telephone consultants to the REA Administrator.

It was disclosed that 23 per cent of 4,939 independent companies responded to the questionnaire. From this group, 72 per cent indicated they could use borrowed capital to good advantage to improve and expand their systems. About 46 per cent said sufficient funds were available under

satisfactory terms and conditions from private sources to do the things necessary to improve and expand their systems. This category included most of the larger companies and those serving cities and larger towns.

Questionnaire answers and comments made some interesting criticisms of the REA telephone loan program and suggestions for improvement. Eight per cent of those replying thought the cost of preloan engineering, required by REA, was too expensive. Eight per cent stated that rigid specifications and engineering expense unnecessarily heighten plant costs. Seven per cent disclosed they had a preference for smaller loans for adding to and improving existing systems.

Another 5 per cent believed REA has been assuming too much control over its borrowers, and 4 per cent argued that it takes too long to obtain a loan in the first place. Three per cent found REA's equity requirements too difficult to meet, while 2 per cent regarded loan requirements in general as too stringent.

The questionnaire also tended to suggest that potential borrowers may not have adequate information at their fingertips on how to get a loan. REA said over half of the returns tabulated were from corporations, 16 per cent from industrial proprietors, 4 per cent from partnerships, 12 per cent from mutuals, and 10 per cent from co-operatives. Together the 1,126 systems reporting operate more than 4,000 exchanges and serve nearly 4,000,000 subscribers. Twenty-three per cent of all returns were either from present REA borrowers or from those with loan applications pending.

REA Administrator Hamil recently named a new group of industry consultants to serve on the REA telephone advisory committee. It replaces the group which served until the early part of this year.

THE seventeen members of this new committee are:

Orla L. Moody, staff engineer, American Telephone and Telegraph Company, New York, New York, for the Bell system; William C. Henry, president, Northern Ohio Telephone Company, Bellevue, Ohio, for the United States Independent Telephone Association; Riggs Shepperd, manager, Southwest Texas Telephone Co-operative, Hondo, Texas, for the National Telephone Co-operative Association.

John Birchmore, president, Comer Telephone Company, Comer, Georgia; Roy C. Boecher, manager, Pioneer Telephone Co-operative, Kingfisher, Oklahoma; Donald H. Brooks, manager, West River Mutual Aid Corporation, Hazen, North Dakota; Daniel B. Corman, executive vice president, Northeastern Telephone Corporation, London, Kentucky; Richard D. Crowe, manager, Dos Palos Telephone Company, Dos Palos, California; Harold C. Ebaugh, manager, Triangle Telephone Association, Havre, Montana; Harold L. Ericson, president, Minnesota Central Telephone Company, Hector, Minnesota; Fred R. Harris, president, Southern Telephone Company, Jackson, Michigan; Edward D. Hildreth, manager, DeKalb Telephone Co-operative, Alexandria, Tennessee; Dale D. Jacobson, manager, Sully Buttes Telephone Co-operative, Highmore, South Dakota; S. A. Lane, president, Western Arkansas Telephone Company, Russellville, Arkansas; Joe Roberts, president, Inter-County Telephone Company, Gallatin, Missouri; Dean Searls, manager, Adams Telephone Co-operative, Camp Point, Illinois; Herbert H. Welsh, president, Northern Kansas Telephone Company, Effingham, Kansas.

Financial News and Comment

By OWEN ELY

Atomic Power Developments

With considerable fanfare, Queen Elizabeth recently dedicated England's combined military and commercial atomic reactor at Calder Hall, first of a series of plants to obtain plutonium, and produce power to supplant the dwindling supply of coal from British mines. In a 12-page special supplement, the *London Times* has printed a number of special articles on the British atomic power program, stating in its lead editorial:

> Calder Hall is not only an achievement in its own right, it is also the model for the first nuclear power stations to be planned in any country as part of a considered programme of electricity generation from the atom. There are reasons for this distinction. Of the four countries which so far are most advanced in atomic energy, Great Britain alone not only lacks a cheap source of conventional energy, but also has a need, already urgent, for more electricity. So it is that, while the United States and the Soviet Union are building many different types of nuclear power stations experimentally, Britain is committed to a programme planned by stages.

The British program consists of three parts. The Atomic Energy Authority's stations (Calder "A" is the first of four) are designed primarily to produce plutonium. When the second unit is in operation around the end of 1956, Calder will have a capacity of nearly 70,000 kilowatts. The second construction program will cover plants specifically designed for power production, with the first three producing nearly 300,000 kilowatts. A gas-cooled reactor will first be used but it appears likely that later liquid sodium may be tried. These units will probably not be ready for operation until the late 1960's. In the third stage, the breeder type of reactor will be developed (a prototype is already being built in the north of Scotland) which will be more economical in its use of fuel.

The cost of the first Calder Hall plant is about £16,500,000, and including the initial supply of nuclear fuel capital cost per kilowatt will approximate £150,

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which at the official rate of exchange equals $420. This is nearly three times as much as the average cost of conventional power stations (about £55 or $154). The kilowatt figure compares with the estimated cost of Commonwealth Edison's 180,000-kilowatt reactor plant of about $183, or $250 if research and development costs contributed by other utilities are included.

On the other hand, operating costs of these nuclear stations "are likely to be only half those of conventional stations," according to Sir Edwin Plowden, chairman of the Atomic Energy Authority. "Moreover, there is scope for marked improvements to be made in the nuclear stations. For example, higher heat output and operating temperatures and a longer period of irradiation involving less frequent reprocessing of the fuel should certainly be possible, leading to both lower capital costs a kilowatt and reduced running costs."

In its White Paper issued in July, 1955, the British government had proposed to build twelve nuclear stations by 1965 with a total capacity of nearly 2,000,000 kilowatts, while in another decade this would be increased to 10-15,000,000 kilowatts.

Now this program has been stepped up, according to Sir Edwin, and the first stations to be built for the electricity authorities will have at least twice the capacity mentioned in the White Paper. Hence by 1965, he estimates, Britain may have an installed capacity of about 3-4,000,000 kilowatts instead of 2,000,000 as proposed in the White Paper. By 1963, he thinks, the country might stop building fuel-burning plants and construct only atomic reactors; in this event nuclear capacity might rise to 30,000,000 kilowatts by 1975. During the earlier years nuclear stations would be run as a base load, which would reduce operating costs per kilowatt-hour; in later years the load factor might decline, increasing kilowatt-hour cost, which factor might be offset by increased efficiency of design.

Sir Edwin estimated that the imported uranium, averaged over the life of the plants, would cost only about one-tenth as much as oil or coal, with one ton of uranium producing as much heat as 10,000 tons of coal. If the cost of nuclear power continues to decline and the cost of coal to rise, he concluded that perhaps an even larger and more rapid expansion of the nuclear power program would be warranted.

The special supplement contains a wealth of historical and descriptive information about nuclear power in Britain, but there is no detailed discussion of over-all production cost per kilowatt-hour and little mention of the vital problems of atomic waste disposal and risk of radioactive fall out—though this type of reactor is probably one of the safest. However, in a lengthy story on "How the Reactors Were Planned," B. L. Goodlet states that "subject to the expected life of the fuel elements and of the reactor structure being achieved, Calder Hall should produce electricity at a cost not much greater than that of a modern coal-fired station in Britain." This seems to indicate that high capital costs more than outweigh operating savings.

In the United States some politicians are urging heavy government participation in the construction of atomic power reactors, along the lines of the Gore Bill, while on the other hand vehemently deploring continued government experiments with military uses of atomic energy. They continue to play down the progress made by private utilities in the construction of reactors and to repeat the canards that Eng-

land and Russia are outstripping the U. S. in this field.

IN response to inquiries doubtless generated by this political agitation, the AEC recently published a complete summary of the 241 nuclear reactors "built, building, or planned in the U. S. as of October 1, 1956." These include 131 low-temperature reactors, not useful for power generation; 43 military reactors, including 27 designed to furnish power; 17 civilian power reactor experiments; and 23 full-scale civilian power reactors of which six will be located abroad.

On page 12 of this tabulation only two important reactors, the AEC-Duquesne plant in Pennsylvania and the Power Reactor Development plant in Michigan, are listed as "under construction," along with the small Pacific Gas and Electric reactor. The Consolidated Edison, Commonwealth Edison, and Yankee Atomic plants are bracketed with a number of others under the heading "planned." Such listing seems rather unfair to Consolidated Edison, which is the only utility to undertake the construction of a large reactor singlehanded or without special government assistance, at an estimated cost of $55,000,000. An immense amount of preliminary work has been done on designs and on exploring the site, and the company expects to start work on the foundations of the station within a few days, having received a construction permit last May.

The company some time ago purchased $537,000 worth of thorium from the AEC, and applied for the necessary amount of uranium-235 for one of its con-

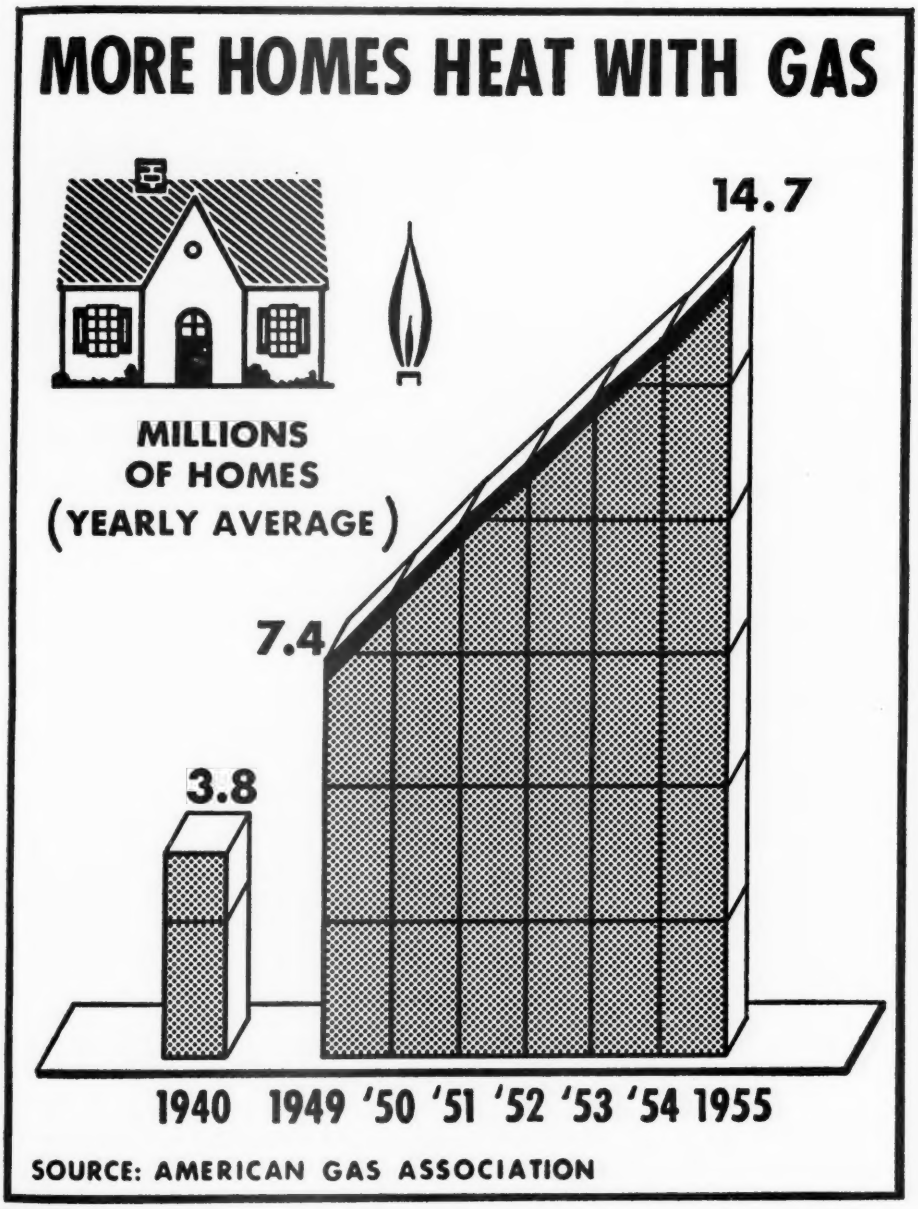
(*Continued on page 777*)

SEPTEMBER UTILITY FINANCING

Date	*Amount*	*Description*	*Price To Public*	*Underwriting Spread*	*Offering Yield*	*Moody Rating*	*Success of Offering, Etc.*
		Bonds					
9/11	$15.0	Gulf States Util. 1st 4¼s 1986	100.85	.77C	4.20%	Aa	a
9/13	15.0	Nor. States Pr. 1st 4¼s 1986	101.36	.79C	4.17	Aa	a
9/19	4.0	So. Nevada Pr. 1st 5¼s 1986*	101.00	2.74C	5.43	Ba	d
9/19	50.0	Tenn. Gas Trans. 1st 4¾s 1976*	100.65	1.10N	4.70	A	b
9/19	2.5	Intermountain Gas 6% Sub. Notes 1962 and Com. Stock**	50.00	3.50N	—	—	a
9/26	20.0	Virginia Elec. & Pr. 1st 4⅛s 1986*	102.00	.45C	4.01	Aa	a
		Preferred Stocks					
9/6	6.0	Rochester G. & E. 4.95%	100.00	2.00N	4.95	—	a
9/19	20.0	Tenn. Gas Trans. 5% Conv. (f)	100.00	3.00N	5.00	—	b
		Common Stock—Offered by Subscription				*Earns.-Price Ratio*	
9/12	1.7	Bangor Hydro-Electric	31.50	—	5.71	8.7	h
		Common Stocks—Offered to Public					
9/11	3.7	Gulf States Utilities	37.00	1.19C	4.32	5.8	b
9/12	24.3	Southern Calif. Edison	48.50	1.21N	4.95	7.1	a

*Cash sinking fund. **Offered in units of $50 notes and one share of common. C—Competitive. N—Negotiated. a—It is reported that the issue was well received. b—It is reported that the issue was fairly well received. d—It is reported that the issue sold slowly. f—The issue is convertible into three shares of common to September 1, 1961, then into 2.65 shares to September 1, 1966. h—Offered to stockholders on a 1-for-6 basis with oversubscription; not underwritten, but dealers received 75 cents a share on subscriptions. The issue was 96 per cent subscribed under the primary subscription, with an additional 14 per cent on oversubscriptions.

Source, Irving Trust Company.



FOR the past seven years, homes heated by gas have increased more than one million per year. New installations during this period have surpassed the total number of gas-heated homes in the entire previous history of the gas utility industry. It is estimated that nearly 4 million additional homes will be heated by gas in the next three years.

PUBLIC UTILITIES SECURITIES
OFFERED FOR SUBSCRIPTION AND/OR SALE
(000 omitted)

	January 1 to September 30, 1956					January 1 to September 30, 1955				
	Total	Electric Companies	Gas Companies	Telephone Companies	Other Companies	Total	Electric Companies	Gas Companies	Telephone Companies	Other Companies
Long-Term Debt										
Offered Publicly	$1,373,585	$ 661,500	$213,585	$ 488,000	$10,500	$ 896,507	$ 592,500	$140,507	$ 155,500	$ 8,000
Offered Through Subscription	111,846	99,779	1,173	10,854	-	678,403	37,737	3,500	637,166	-
Offered Privately	233,362	27,500	137,315	40,000	28,547	396,530	61,150	217,680	90,350	27,350
Total	$1,718,753	$ 748,779	$352,073	$ 538,854	$39,047	$1,971,440	$ 691,387	$361,687	$ 883,016	$35,350
Preferred Stock										
Offered Publicly	$ 239,242	$ 134,265	$ 89,000	$ 15,977	$ -	$ 197,050	$ 112,425	$ 51,000	$ 27,700	$ 5,925
Offered Through Subscription	31,902	32,836	5,066	-	23,243	23,243	-	-	-	-
Offered Privately	21,900	10,600	2,500	7,500	1,300	40,200	20,750	10,000	2,250	7,200
Total	$ 293,044	$ 177,701	$ 96,566	$ 23,477	$ 1,300	$ 260,493	$ 133,175	$ 61,000	$ 29,950	$13,125
Common Stock										
Offered Publicly	$ 75,765	$ 63,362	$ 1,851	$ 8,479	$ 2,073	$ 182,955*	$ 90,660	$ 78,353*	$ 7,762	$ 6,180
Offered Through Subscription	791,655	141,254	16,454	633,947	-	349,450	140,440	119,154	84,225	5,631
Total	$ 867,420	$ 204,616	$ 18,305	$ 642,426	$ 2,073	$ 532,405	$ 231,100	$197,507	$ 91,987	$11,811
Total Financing	$2,885,217	$1,131,096	$466,944	$1,244,757	$42,420	$2,764,338	$1,084,905	$620,194	$1,004,953	$54,286
Segregation of Financing - By Purpose										
Total Refunding	$ 60,098	$ 4,026	$ 20,160	$ 34,482	$ 1,430	$ 229,972	$ 129,348	$ 29,257	$ 71,367	$ -
Total Divestments	-	-	-	-	-	$ 66,919	$ 3,150	$ 60,589	$ -	$ 3,180
New Money										
Long-Term Debt	$1,677,163	$ 748,779	$331,913	$ 598,854	$37,617	$1,777,198	$ 587,387	$342,430	$ 818,031	$29,350
Preferred Stock	280,536	173,676	96,566	8,994	1,300	217,011	139,318	41,000	23,568	13,125
Common Stock	867,420	204,615	18,305	642,427	2,073	473,238	225,702	146,918	91,987	8,631
Total New Money	$2,825,119	$1,127,070	$446,784	$1,210,275	$40,990	$2,467,447	$ 952,407	$530,348	$ 933,586	$51,106
Total Financing	$2,885,217	$1,131,096	$466,944	$1,244,757	$42,420	$2,764,338	$1,084,905	$620,194	$1,004,953	$54,286
Segregation of Financing - By Purpose										
Competitive Bidding	$1,331,790	$ 716,940	$116,350	$ 488,000	$10,500	$ 901,665	$ 685,871	$ 53,794	$ 154,000	$ 8,000
Negotiated Sales	$ 356,802	$ 182,187	$188,096	$ 24,456	$ 2,073	$ 374,369	$ 109,715	$215,588	$ 36,961	$12,105
Subscription										
Competitive Bidding	$ 53,721	$ 48,655	$ 5,066	$ -	$ -	$ 52,648	$ 16,910	$ 35,738	$ -	$ -
Negotiated Sales	173,711	96,235	9,455	68,021	-	156,046	107,306	16,444	28,703	$ 3,591
No Underwriting	713,931	88,679	8,172	616,780	-	842,402	77,201	70,472	682,689	2,040
Total Subscription	$ 941,363	$ 233,869	$ 22,693	$ 684,801	$ -	$1,051,096	$ 201,419	$122,654	$ 721,392	$ 5,631
Private Sales	$ 255,252	$ 38,100	$139,815	$ 47,500	$29,847	$ 437,208	$ 87,900	$228,158	$ 92,600	$28,550
Total Financing	$2,885,217	$1,131,096	$466,944	$1,244,757	$42,420	$2,764,338	$1,084,905	$620,194	$1,004,953	$54,286

* Includes $478,000 Common Stock sold privately.

† Includes $14,377,000 preferred stock not underwritten.

Ebasco Services Incorporated
Corporate Finance Department
October 3, 1956 - AVR

tractors, Babcock & Wilcox, to conduct a "critical experiment" on a full-size reactor core. Babcock & Wilcox has completed an experimental laboratory in Virginia to carry out this work. Consolidated Edison has ordered the oil superheater and the turbine for the plant, so that the project seems well past the "planning" stage.

CON ED recently issued a little brochure on "Atomic Energy at Indian Point" describing its pressurized-water reactor, which will follow the design used in the *U. S. S. Nautilus*. The reactor will make steam at a temperature of 450 degrees, which will pass through a separate oil-fired superheater to raise its temperature to 1,000 degrees. The plant will use only about 350 pounds of uranium and 140 pounds of thorium a year, while the superheater will burn about 30,000,000 gallons of oil. On a conventional operating basis the plant would require 525,000 tons of coal or 96,000,000 gallons of oil annually.

While the reactor at Monroe, Michigan, is classed as "under construction" in the AEC bulletin, the commission has recently yielded to the petitions of various labor agencies to intervene in opposition to the provisional construction permit issued for that project. Political attacks contending that this "fast breeder" plant is too hazardous because of the danger of radioactive fall out are based on the unfavorable report submitted June 6th by the chairman of an advisory committee on reactor safeguards. The commission has now released the report of this committee (which is highly technical) and has set November 13th as a hearing date.

AEC Chairman Strauss' talk before the New York Board of Trade October 10th was obviously designed to counteract Democratic criticisms of the administration. He stated that "American industry, as a result of the uses it already is making of atomic energy, is presently enjoying an estimated annual savings of $250,000,000. The savings to agriculture amount to another very large and growing sum." He referred to the many forms of assistance being given to friendly foreign countries to develop nuclear power plants, and stated that American business firms are already discussing contracts totaling over $200,000,000 for such plants. A conference of 81 nations is in progress at the United Nations, planning to establish the International Atomic Agency proposed by President Eisenhower.

He pointed out that 18 U. S. nuclear power plants should go into operation (starting with the Shippingport plant) between 1957 and 1962, with a total capacity of about 1,200,000 kilowatts. These plants would represent an investment of over $650,000,000, over half of which would be provided by industry. (Six plants costing over $200,000,000 will be built by industry without any direct financing subsidy.) He emphasized that the British plant at Calder Hall is a military plant with electricity a by-product, and that Russia thus far has only one small (5,000 kilowatts) nuclear plant in operation—apparently "primitive" compared with U. S. reactors.

EEI-AGA Statistical Projects

THE Edison Electric Institute Statistical Committee expects shortly to publish a "Glossary of Electric Utility Terms, Financial and Technical." The project was started by President England of Atlantic City Electric and has been carried forward by F. A. Keane of Public Service Electric & Gas, chairman of the statistical committee. Douglas Tonge of American Gas & Electric and Roy Crim of West Penn Power are coeditors of the glossary

and have been assisted by EEI committees.

The glossary will be published in pocket size (8½x5½"), with 46 pages, and will define about 300 financial, accounting, and technical terms. Such terms include cost per million Btu, contributions in aid of construction, capital stock discount and expense, name-plate rating, energy loss, excitation, load factor, transmission, distribution, capitalization, etc. The glossary can be purchased from the institute at 50 cents a copy, with a quantity discount. Consideration is being given to publishing a similar glossary, or a supplement to the present issue, covering terms relating to nuclear power projects.

Another project which the committee will consider is the preparation of a manual for the guidance of managements in making intercompany comparisons among investor-owned electric utility companies. This may be completed in about a year.

A THIRD statistical project is the revision of the form of the "Annual Statistical Report" prepared by electric and gas utility companies for the AGA, EEI, insurance companies, and security analysts. Thoroughgoing revision is only attempted about every five years. A few changes, such as the insertion of a balance sheet and a few new statistical items (miles of territory, fuel cost per million Btu, etc.), are being made this year, but a complete review and revision are planned for next year.

A "task force" committee of analysts headed by Douglas Tonge has been set up, including five insurance men and fourteen representatives of banks, investment houses, and financial services, to consider ideas for improving the form. A subcommittee headed by Charles Tatham will evaluate the findings and clear them with the EEI and AGA Statistical committees for final action. Suggestions for changes or improvements in the form may be sent to Miss Marilyn Walsh of the Irving Trust Company, 1 Wall street, who is acting as secretary to the subcommittee.

DATA ON ELECTRIC UTILITY STOCKS

Rev. (Mill.)			*10/17/56 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earnings**	*% Increase*	*Aver. Incr. In Sh. Earns. 1951-55*	*Price-Earns. Ratio*	*Div. Payout*	*Approx. Common Stock Equity*
$258	S	American G. & E.	37	$1.44	3.6%	$2.01Au*	4%	9%	18.4%	72%	34%
39	O	Arizona Pub. Serv.	22	1.00	4.5	1.59Au	16	9	13.8	63	31
10	O	Arkansas Mo. Power	23	1.24c	5.4	1.90Je	25	8	12.1	65	30
27	S	Atlantic City Elec.	28	1.20	4.3	1.56Au	5	10	18.0	77	27
118	S	Baltimore G. & E.	33	1.60	4.8	2.27Je	28	5	14.5	70	41
6	O	Bangor Hydro-Elec.	31	1.90	6.1	2.86Jy	NC	3	10.8	66	31
5	O	Black Hills P. & L.	24	1.40	5.8	2.15Ap	5	3	11.2	65	27
91	S	Boston Edison	52	2.80	5.4	3.40Ap	NC	2	15.3	83	53
19	A	Calif. Elec. Power	15	.76	5.1	.89Je	6	17	16.8	85	35
17	O	Calif. Oreg. Power	32	1.60	5.0	2.08N	17	4	15.4	77	37
7	O	Calif. Pac. Util.	28	1.50	5.4	2.23Au	2	5	12.6	67	29
58	S	Carolina P. & L.	24	1.10	4.6	1.74Se	9	4	13.8	63	37
26	S	Cent. Hudson G. & E.	16	.80	5.0	1.10Je	10	10	14.5	73	33
19	O	Cent. Ill. E. & G.	30	1.60	5.3	2.35Je	23	8	12.8	68	30
33	S	Cent. Ill. Light	55	2.60	4.7	4.10Se	29	8	13.4	63	41
50	S	Cent. Ill. P. S.	29	1.60	5.5	2.47Ju	10	17	11.7	65	35
11	O	Cent. Louisiana Elec.	33	1.60	4.8	2.03Je	27	6	16.3	79	30
33	O	Cent. Maine Power	23	1.40	6.1	1.65Au	D21	7	13.9	85	33
114	S	Cent. & South West	35	1.60	4.6	2.16Je	10	13	16.2	74	36
11	O	Cent. Vermont P. S.	16	1.00	6.3	1.22Se	D7	2	13.2	83	28
108	S	Cincinnati G. & E.	27	1.20f	4.4	2.16Je	19	8	12.5	56	39
6	O	Citizens Util. "B"	14	.90a	6.4a	1.08Je	—	11	13.0	83	40
104	S	Cleve. Elec. Illum.	38	1.60	4.2	2.71Je	29	9	14.0	59	47
4	O	Colo. Cent. Power	27	1.20	4.4	1.64Je	8	5	16.4	73	24

Rev. (Mill.)		(Continued)	10/17/56 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings*	% Increase	Aver. Incr. In Sh. Earns. 1951-55	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
45	S	Columbus & S. O. E.	30	1.60	5.3	2.16Je	—	5	13.9	74	37
336	S	Commonwealth Edison	40	2.00	5.0	2.72Je	10	9	14.7	71	47
10	A	Community Pub. Service	24	1.20	5.0	1.77Je	—	18	13.6	67	51
2	O	Concord Elec.	44	2.40	5.5	2.71De	3	2	16.2	89	61
65	O	Connecticut L. & P.	20	1.00	5.0	1.25Au	10	4	16.0	80	33
21	O	Connecticut Power	43	2.25	5.2	2.65Je	2	5	16.2	85	42
494	S	Consol. Edison	45	2.40	5.3	3.12Je	2	10	14.4	77	41
189	S	Consumers Power	49	2.20e	4.5	3.32Au	6	5	14.8	66	41
71	S	Dayton P. & L.	47	2.20	4.7	3.46Ma	15	4	13.6	64	38
34	S	Delaware P. & L.	41	1.60	3.9	2.27Je	19	10	18.1	70	32
220	S	Detroit Edison	35	1.80	5.1	2.28Se	D4	11	15.3	79	42
120	A	Duke Power	28	1.20	4.3	1.83Je	12	22	15.3	66	54
89	S	Duquesne Light	37	2.00	5.4	2.46Je	13	4	15.0	81	36
27	O	Eastern Util. Assoc.	35	2.20	6.3	2.56Au	5	0	13.7	86	36
2	O	Edison Sault Elec.	17	.80	4.7	1.14Je	8	24	14.9	70	40
10	O	El Paso Elec.	41	1.80	4.4	2.58Au	11	8	15.9	70	39
11	S	Empire Dist. Elec.	30	1.60	5.3	2.25Je	17	1	13.3	71	30
4	O	Fitchburg G. & E.	51	3.00	5.9	3.52De	8	3	14.5	85	55
43	S	Florida Power Corp.	49	1.60	3.3	2.57Je	24	19	19.1	62	34
93	S	Florida P. & L.	46	1.20	2.6	2.40Se	25	16	19.2	50	40
163	S	General Pub. Util.	37	1.90	5.1	2.87Je	12	12	12.9	66	39
6	O	Green Mt. Power	16	1.00	6.3	1.23Je	8	7	13.0	81	37
51	S	Gulf States Util.	35	1.60	4.6	2.22Au	10	17	15.8	72	31
21	A	Hartford E. L.	57	2.88	5.1	4.38Je	—	12	13.0	66	47
5	O	Haverhill Elec.	37	2.35	6.4	2.62De	34	—	14.1	82	100
18	O	Hawaiian Elec.	43	2.20g	5.1	3.65Se	24	—	11.8	59	37
66	S	Houston L. & P.	50	1.40	2.8	2.79Au	21	20	17.9	50	42
8	O	Housatonic P. S.	23	1.40	6.1	1.41De	19	0	16.3	99	54
25	S	Idaho Power	29	1.20	4.1	2.11Je	17	7	13.7	57	35
78	S	Illinois Power	58	2.60	4.5	3.92Au	17	6	14.8	66	35
40	S	Indianapolis P. & L.	29	1.50	5.2	2.01Je	18	2	14.4	75	38
19	S	Interstate Power	14	.80	5.7	1.06Je	6	6	13.2	75	31
30	O	Iowa Elec. L. & P.	30	1.50	5.0	2.29Jy	18	10	13.1	66	31
31	S	Iowa-Ill. G. & E.	30	1.80	6.0	2.46Je	5	2	12.2	75	40
35	S	Iowa Power & Lt.	25	1.40	5.6	2.00Je	16	1	12.5	70	35
30	O	Iowa Pub. Serv.	16	.80	5.0	1.14Au	24	3	14.0	70	33
13	O	Iowa Southern Util.	22	1.28	5.8	1.78Au	9	7	12.4	72	36
56	S	Kansas City P. & L.	41	2.00	4.8	2.77Jy	23	8	14.8	72	35
27	S	Kansas G. & E.	26	1.20	4.6	2.05Jy	5	9	12.7	59	26
40	S	Kansas Pr. & Lt.	23	1.20	5.2	2.05Je	35	9	11.2	59	27
37	O	Kentucky Util.	25	1.28	5.1	2.00Je	D5	9	12.5	64	35
7	O	Lake Superior D. P.	24	1.20	5.0	1.67Je	14	4	14.4	72	38
6	O	Lawrence Electric	29	1.75	6.0	1.87De	34	D	15.5	94	62
17	S	Long Island Lighting	22	1.10	5.0	1.54Je	33	4	14.3	71	34
52	S	Louisville G. & E.	58	2.20	3.8	3.92Je	21	4	14.8	56	35
7	O	Lowell Electric Lt.	53	3.00	5.7	3.64De	19	D	14.6	82	59
9	O	Lynn G. & E.	29	1.60	5.5	2.03De	1	8	14.3	79	76
8	O	Madison G. & E.	40	1.80	4.5	4.04Jy	NC	10	9.9	45	47
4	A	Maine Pub. Service	16	1.08	6.8	.98Au	D33	3	16.3	110	31
5	O	Michigan G. & E.	47	1.50b	6.2g	4.03Je	18	13	11.7	37	35
144	S	Middle South Util.	29	1.50	5.2	2.09Au	10	6	13.9	72	35
26	S	Minnesota P. & L.	27	1.40	5.2	2.07Se	7	8	13.0	68	34
2	O	Miss. Valley P. S.	30	1.40J	4.7	2.24Se	D10	3	13.4	63	31
10	A	Missouri Pub. Ser.	14	.60h	4.3	1.03Au	24	19	13.6	58	29
5	O	Missouri Util.	27	1.36	5.0	1.90Je	3	3	14.2	72	36
37	S	Montana Power	40	1.80	4.5	3.07Jy	10	5	13.0	59	36
130	S	New England Elec.	17	1.00	5.9	1.20Je	9	0	14.2	83	33
40	O	New England G. & E.	18	1.00	5.6	1.48Au	17	5	12.2	68	40
44	O	New Orleans P. S.	44	2.25	5.1	2.59Au	D1	0	17.0	87	40
2	O	Newport Electric	20	1.00	5.0	1.40Ja	16	0	14.3	71	34
77	S	N. Y. State E. & G.	37	2.00	5.4	2.83Au	D2	6	13.1	71	38
210	S	Niagara Mohawk Pr.	30	1.80	6.0	2.27Jy	1	6	13.2	79	34
75	O	Northern Ind. P. S.	37	1.80	4.9	2.84Je	11	6	13.0	63	33
118	S	Nor. States Power	17	.90	5.3	1.18Je	10	9	14.4	76	33
9	O	Northwestern P. S.	18	1.00	5.6	1.44Je	8	4	12.5	69	25

Rev. (Mill.)		(Continued)	10/17/56 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings*	% Increase	Aver. Incr. In Sh. Earns. 1951-55	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
123	S	Ohio Edison	50	2.48	5.0	3.72Se	10	9	13.4	66	38
40	S	Oklahoma G. & E.	38	1.70	4.5	2.43Se	9	10	15.6	70	30
15	O	Otter Tail Power	28	1.60	5.7	2.27Au	12	9	12.3	70	34
443	S	Pacific G. & E.	49	2.40	4.9	3.51Je	10	16	14.0	68	33
44	O	Pacific P. & L.	29	1.48	5.1	1.96Je	10	4	14.8	75	28
123	S	Penn Power & Light	46	2.40	5.2	3.44Au	12	9	13.4	70	29
210	S	Phila. Electric	38	1.80	4.7	2.53Jy	11	5	15.0	71	40
32	O	Portland Gen. Elec.	23	1.20	5.2	1.67Jy	3	6	13.7	72	39
58	S	Potomac Elec. Pr.	22	1.10	5.0	1.48Je	30	7	14.9	74	40
77	S	Pub. Serv. of Colo.	41	1.80I	4.4	2.83Je	19	7	17.2	64	38
273	S	Pub. Serv. E. & G.	32	1.80	5.6	2.37Se	8	2	13.5	76	37
67	S	Pub. Serv. of Indiana	37	2.00	5.4	2.43Au	1	3	15.2	82	33
26	O	Pub. Serv. of N. H.	17	1.00	5.9	1.22Se	D1	13	14.0	82	36
11	O	Pub. Serv. of N. M.	14	.68	4.9	1.07Je	13	4	13.1	63	33
23	S	Puget Sound P. & L.	25	1.28	5.1	1.59Je	9	10	15.7	80	56
52	S	Rochester G. & E.	28	1.60	5.7	2.20Je	17	8	12.7	73	36
17	O	Rockland L. & P.	18	.70	3.9	.97De	20	11	18.6	72	29
8	S	St. Joseph L. & P.	24	1.40	5.8	1.74Je	12	7	13.8	80	40
45	S	San Diego G. & E.	23	.96	4.2	1.52Au	45	2	15.1	63	40
8	O	Savannah E. P.	41	1.68	4.1	2.63Je	24	5	15.6	64	28
8	O	Sierra Pacific Pr.	21	1.20	5.7	1.56Je	5	14	13.5	77	28
154	S	So. Calif. Edison	48	2.40	5.0	3.36Je	8	3	14.3	71	36
38	S	So. Carolina E. & G.	19	1.00	5.3	1.41Au	7	40	13.5	71	29
6	O	Southern Colo. Pr.	14	.70	5.0	1.24Au	D1	11	11.3	56	37
210	S	Southern Company	21	1.00	4.8	1.48Au	7	7	14.2	67	32
16	S	So. Indiana G. & E.	31	1.60	5.2	1.93Au	D17	5	16.1	83	33
5	O	So. Nevada Power	17	1.00	5.9	1.44Je	10	41	11.8	69	34
1	O	Southern Utah Pr.	17	1.00	5.9	1.13Je	20	D	15.0	88	38
3	O	Southwestern E. S.	20	1.08	5.4	1.66My	—	4	12.0	65	29
33	S	Southwestern P. S.	27	1.40	5.2	1.59Jy	2	4	17.0	88	30
21	A	Tampa Elec.	30	1.00	3.3	1.54Au	15	10	19.5	65	42
127	S	Texas Utilities	36	1.28	3.6	2.21Au	8	13	16.3	58	38
35	S	Toledo Edison	13	.70	5.4	1.04Je	2	5	12.5	67	30
12	O	Tucson G. E. L. & P.	28	1.20	4.3	1.83Je	6	10	15.3	66	33
119	S	Union Elec. of Mo.	27	1.40	5.2	1.75Je	4	13	15.4	80	37
30	O	United Illuminating	27	1.30	4.8	1.61De	3	9	16.8	81	51
5	O	Upper Peninsula Pr.	30	1.60	5.3	2.16Je	D3	14	13.9	74	36
38	S	Utah Power & Lt.	50	2.20	4.4	3.40Au	8	8	14.7	65	42
106	S	Virginia E. & P.	43	1.80	4.2	2.70Jy	10	13	16.0	67	34
24	S	Wash. Water Power	36	1.80	5.0	2.23Se	12	14	16.1	81	44
127	S	West Penn Elec.	26	1.40	5.4	2.10Au	5	10	12.4	67	29
64	O	West Penn Power	46	2.40	5.2	3.25Je	3	13	14.2	74	33
11	O	Western Lt. & Tel.	33	2.00	6.1	3.04Au	19	7	10.9	66	31
24	O	Western Mass. Cos.	40	2.20	5.5	3.04Au	1	12	13.2	73	52
95	S	Wisc. El. Pr. (Cons.)	33	1.60	4.8	2.28Je	3	16	14.5	70	39
37	O	Wisconsin P. & L.	26	1.28	4.9	1.78Je	8	4	14.6	72	35
34	S	Wisconsin P. S.	23	1.20	5.2	1.76My	NC	7	13.1	68	35
		Averages			5.1%			8%	14.3	71%	
		Foreign Companies									
188	S	Amer. & Foreign Pr.	14	$ .80	5.7%	$2.02Ma	6%	2%	6.9%	40%	46%
139	A	Brazilian Trac.	8	.50	6.3	1.18De	D7	D	6.8	42	72
63	A	British Columbia Pr.	45	1.20	2.6	2.05De	37	27	22.9	59	27
16	A	Gatineau Power	30	1.40	4.6	2.06De	5	15	14.5	68	30
11	A	Quebec Power	27	1.20	4.4	1.73De	11	12	15.6	69	48
45	A	Shawinigan Wtr. & Pr.	85	1.80	2.1	3.48De	30	22	24.4	52	35

A—American Stock Exchange. B—Boston Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July: Au—August; Se—September; Oc—October; N—November; De—December. *Based on average numbe· of shares. a—Estimated annual rate. The "A" stock receives stock dividends. b—Also 3 per cent stock dividend December 30, 1955, which is included in the yield. c—Also 2 per cent stock dividend January 10, 1956. e—Also 5 per cent stock dividend June 15, 1956. f—Also 5 per cent stock dividend August 15, 1956. g—Also 10 per cent stock dividend April 30, 1956. h—Also stock dividend of one share for each 200 held September 12, 1956. I—Also 10 per cent stock dividend November 16, 1956. J—Also 10 per cent stock dividend August 31, 1956.

What Others Think

The Rôle of the States in the Power Reactor Program

THE question of state *versus* federal regulation of the white atom of peace is not a new question. It has existed ever since the passage of the Atomic Energy Act of 1954, and indeed before. That period may not seem long, but it has been long enough for considerable thought, and much debate, to have been devoted to the question. The fact that 20 authoritative articles are cited in the bibliography of the June 1, 1956, report of Atomic Industrial Forum, Inc., on "State Activities in Atomic Energy" is indicative of the interest that has been taken in this subject.

In this connection the white peace atom must, of course, be distinguished from the black atom of war. No one is concerned about any realm of state A-bomb control. That such control is exclusively a federal function, under the Constitution as well as the 1954 act, is conceded by all. The conflict of opinion has concerned only the jurisdictional aspects of the white atom, whose smiling countenance ushered in President Eisenhower's "Atoms-for-Peace" program.

The existence of unresolved differences of opinion on this jurisdictional question was made clear from the report of Workshop I of the recently held University of Michigan Law School Summer Institute on Legal Problems of Atomic Energy. Workshop I, composed of some twenty members of the legal profession from all over the country, especially invited to attend because of their familiarity with this jurisdictional question, considered the various legal and economic aspects of state regulation *versus* federal regulation in the field of public health and welfare. That was the topic assigned them.

THE conclusions of the members were not unanimous by any means. Some felt that federal control over regulation for protection against radiation hazards had been completely provided for in the 1954 act, and that those provisions were intended to be, and should be, exclusive. Others felt differently, and bolstered their reasoning with citations of authority and practical economic arguments based on traditional concepts. As might be expected, it was the federal government lawyers in Workshop I who held to the former view, and the state agency lawyers who held to the latter. The labor lawyers present sided with the former, and the private industry lawyers, largely, with the latter, though there were some who supported the exclusive federal control view. That "no unanimous conclusions were reached" in the field of health and welfare regulation jurisdiction was the one thing all the members of Workshop I could and did agree upon.

In the field of power reactors, apart from the health and welfare aspects of their operation, Workshop I, however, did reach virtual unanimity of opinion. For example, its report stated:

> We believe that certain types of regulation should remain under exclusive federal control, such as radiological safety of reactor design. We recognize, however, that conventional types of state regulation—building and electrical codes, water pollution restrictions and similar controls—will have some application even to nuclear installations. Even in the atomic energy field there may be special local problems of transportation, fire protection, and the like which permit of local control.

One of the special local problems not specifically mentioned in the report of Workshop I, but covered in the discussions and in the summary of the report as announced by the Workshop I chairman, was the problem of zoning. The consensus of opinion of the Workshop I members was that if a valid general zoning ordinance existed, precluding the location of industrial installations in a particular area, the ordinance should be upheld, regardless of any reactor location sanction accorded by the AEC. However, if the ordinance simply precluded the location of atomic installations in the particular area, while not barring other industrial installations, AEC sanction should be taken to override the local prohibition.

In the field of electric power generation, sale, or transmission there was likewise virtual Workshop I unanimity of opinion. That was reflected in its report, which stated:

> We believe that it is clear that the Atomic Energy Act of 1954 does not impair the authority of federal, state, and local governmental agencies with respect to the generation, sale, or transmission of electric power.

That conclusion was, of course, based on the provisions of § 271 of the 1954 act, which provides, specifically, that "Nothing in this act shall be construed to affect the authority or regulations of any federal, state, or local agency with respect to the generation, sale, or transmission of electric power."

However, a question arises in that connection that was not considered by Workshop I. If the Atomic Energy Act provides, as it does, that it may not be construed as affecting the authority of the states with respect to the generation of electric power, that can only mean that the jurisdiction of the states was *thereby* in no way impaired, and that the jurisdiction of the federal government was *thereby* in no way enlarged. Jurisdictional areas in existence at the time of the passage of the act were frozen, but only in so far as the AEC is concerned.

But does that preclude impairment of the one, or enlargement of the other, through judicial determination under some other federal statute? Obviously not. Under § 272 of the act "Every licensee under this act who holds a license from the commission for a utilization or production facility for the generation of commercial electric energy under § 103 and who transmits such electric energy in interstate commerce or sells it at wholesale in interstate commerce shall be subject to the regulatory provisions of the Federal Power Act."

Coming as it does immediately after the disclaimer provisions of § 271, that imposition of federal regulatory control under the Federal Power Act very clearly limits the Atomic Energy Act disclaimer

to reactors whose power is not transmitted in interstate commerce, or whose power is not sold at wholesale across the state lines.

It would thus appear that in so far as reactors transmitting or selling power in interstate commerce are concerned the federal regulatory control disclaimed in § 271 is recaptured by § 272, to be exercised, not by the AEC, but by the FPC. And that raises a very pertinent question of jurisdictional control. As stated, that question was not considered by Workshop I. But it was considered, briefly, on the last day of the September 13th to 15th University of Michigan Law School Summer Institute session, when the report of Workshop I was summarized by its chairman before all the members of the entire institute, which had been split up into five workshops of which Workshop I was but one. The other four workshops, each consisting of some twenty members who had been considering, in their own workshops, problems of radiation injury liability, licensing, international control, and patents, respectively, had, of course, considered problems respecting reactors in those specific fields. And their members, many of whom were well versed in the law applicable to state *versus* federal jurisdictional problems, were privileged to question the Workshop I chairman and offer their own views in supplement of the conclusions of Workshop I.

Inevitably, one of the inquiries made had to do with the conditional construction permit granted August 4, 1956, by the AEC to the Power Reactor Development Company of Detroit for its proposed reactor at Lagoona Beach, Monroe county, Michigan. In that matter, docketed as AEC Docket No. F-16, the AFL-CIO union known as UAW, together with its president, Walter P. Reuther, and two of its other officers, on August 31, 1956, had filed with the AEC a petition for intervention and request for formal hearing. Objection was raised in the petition to the location of the proposed reactor in such a densely populated area, within which, the petition alleged, some 300,000 UAW members lived, and to the type of reactor proposed. The petition alleged that the reactor proposed was a fast neutron-breeder reactor, "the most hazardous of all reactors," and that it was "inherently unsafe." Its construction in the particular area would "create a hazard" according to the petition, which would place the members of the UAW who lived and worked near it "in danger."

The inquiry made of the chairman of Workshop I from the floor referred to the refusal of the AEC to supply the governor of Michigan with certain unclassified documents he had requested, having to do with the proposed reactor, and inquired if that refusal, based on the administratively confidential character of the documents, was consistent with the type of co-operation between the federal government and the states that Workshop I had found to exist.

Of course there could be no authoritative answer to that question. It had been asked in the report of Workshop I itself, and answered only tentatively. "Can the state or local government enforce their requirements even where the Atomic Energy Commission's regulations have been complied with in all respects?" the report asked. In answer thereto it stated:

> In the absence of legislation, the legal answer will probably have to be obtained through the litigation process, and the validity of state or local regulation will be determined on the basis of such factors as legislative history, historical functions of the federal and state governments, the reasonableness of the regulations, and the degree of

interference with the federal atomic energy program.

In the litigation process referred to the answer might be found in § 272 of the act, the section that places all AEC licensees of production facilities for the generation of interstate electric power under the regulatory provisions of the Federal Power Act. The proposed Lagoona Beach reactor site is quite close to the Michigan-Ohio border, and only some 30 miles from Toledo as well as Detroit. Interstate transmission is undoubtedly contemplated, and hence the Federal Power Act regulatory provisions would in all probability be considered applicable by any court called upon to pass upon the question.

SECTION 9(b) of the Federal Power Act requires applicants for hydroelectric power plant licenses to submit to the FPC "satisfactory evidence that the applicant has complied with the laws of the state or state within which the proposed project is to be located . . ." That does not mean that the applicant is required, as a condition to securing a federal license, to present to the FPC evidence of its compliance with all requirements of state statutes for a state permit. Instead, the Federal Power Act has been held to establish a dual system of control, to the extent that it separates those areas of interest which remain under jurisdiction of the states from those areas of interest which are placed under the jurisdiction of the federal government. That was the ruling in State of Iowa et al. *v.* Federal Power Commission (USCA 1949) 82 PUR NS 172, 178 F2d 421. (Rehearing denied January 20, 1950.)

That duality of control exists merely in the division of the several aspects of the hydroelectric enterprise between the state and federal governments, each with final authority over those aspects which are within its own jurisdictional field. It does not require the two governments to share in the final decision of the same issue. That was the decision of the U. S. Supreme Court in First Iowa Hydro-Electric Co-operative *v.* Federal Power Commission (1946) 326 US 715, 63 PUR NS 193, 90 L ed 423, 66 S Ct 906.

In that case, under which the State of Iowa *v.* Federal Power Commission Case was decided, the FPC had denied the applicant's petition for a license to construct a hydroelectric plant on the Cedar river in Iowa, on the ground, raised by that state, that the applicant had presented no evidence that it had a permit from the state, as required by state law, to construct and operate the project. Indeed, under the facts found by the examiner, it could not have been accorded such a state permit. The proposed plan did not call for the rechanneling of the Cedar river water back into that stream, below the proposed dam, as the Iowa law required, but instead called for its diversion into the Mississippi river.

THE U. S. Supreme Court held that to require an applicant to secure a state permit as a condition precedent to securing a federal license would vest a veto power in the state which could destroy the effectiveness of the Federal Power Act, and subordinate to state control the comprehensive planning which the act entrusted to the judgment of the FPC. The FPC may concern itself with whether an applicant can comply with state laws, but it is not required to do so. It may license the project regardless of the evidence of noncompliance, since "The detailed provisions of the act providing for the federal plan of regulation leave no room or need for conflicting state controls."

Hence, as the U. S. Supreme Court held, if a state permit is not required there

"WHAT'S ALL THIS ABOUT A MISSING POWER POLE?"

is no justification for requiring an applicant, as a condition of securing its federal license, to present evidence of its compliance with the requirements of the state for the issuance of a state permit.

That may seem like calling black white, but it is indicative of the determination that in all probability would be accorded any objection to the licensing of a reactor by the AEC when that objection was based on noncompliance with state laws. Even though the Federal Power Act, which is made applicable by § 272 of the Atomic Energy Act to reactors whose power is transmitted or sold in interstate commerce, requires license applicants to provide "satisfactory" evidence that state laws have been complied with, no evidence at all may be taken as "satisfactory" evidence, since the Federal Power Act does not require the FPC to compel the applicant to comply.

And just as the U. S. Supreme Court held as regards the Federal Power Act, so would it probably hold as regards the Atomic Energy Act. To paraphrase its language in the First Iowa Case, quoted above, "The detailed provisions of the

Atomic Energy Act providing for the federal plan of regulation leave no room or need for conflicting state controls." To sanction the latter would "subordinate" to state control the "comprehensive planning" which the Atomic Energy Act "entrusts to the judgment" of the AEC.

THUS, if the conclusions of Workshop I are followed, and questions of radiological safety of reactor design are under exclusive federal control, any objection raised to the Lagoona Beach reactor on the ground that it did not meet the design requirements of the state of Michigan as regards safety would be overruled. Indeed, it is noteworthy that in the UAW petition for intervention no contention that any state law is or would be violated is made.

However, as regards the location objection of the UAW, if that objection were based on the existence of some general zoning enactment of the state, or of Lagoona Beach or the city of Monroe, and the recommendations of Workshop I were followed, the objection would be upheld. Yet that would scarcely be in conformity with the U. S. Supreme Court decision in the First Iowa Case.

Furthermore, the distinction Workshop I made between the legal effect of a general zoning law, and the legal effect of a specific antireactor zoning enactment, scarcely seems to be a realistic one. The latter, as well as the former, would seem to be susceptible to a ruling of supersedure by the federal act.

In determining the jurisdictional areas of duality of control in the atomic reactor field in conformity to the above decisions interpreting the Federal Power Act, it is quite apparent that, in the present state of the reactor art, many pitfalls undoubtedly lie, and great care will have to be exercised in the judicial delineation of those jurisdictional areas lest uneconomic rulings result. It is to be regretted that the agenda of Workshop I, called upon to consider only the question of state regulations in the interest of public health and welfare, was not broadened to include jurisdictional questions attendant reactor design, location, and operation, with which questions the public utility industry is already confronted. Only one paragraph of the report of Workshop I was devoted to the jurisdictional problems attendant public utility regulation.

ONE of the conclusions of Workshop I, however, was that the AEC itself did not have the authority to determine these jurisdictional areas. Either further statutory enactments are necessary or the delineations will have to await judicial determination. Since the latter course means piecemeal delineation, over a long period of time, one of the other workshop members asked the Workshop I chairman from the floor if it would not be well to have any amending statutory enactment operate as an invitation on the part of the federal government to the several states to join it in its partnership with private industry for the development of the reactor program, making of that partnership a three-member firm. It was pointed out in support of that suggestion that ours is a dual system of government, and that our economy, as well as our jurisdictional traditions, requires that the white atom of peace be nurtured by both systems if it is to thrive. The chairman of Workshop I approved that reasoning and acquiesced in that suggestion made from the floor.

Of course that is a rather broad suggestion, and is meaningless unless specific measures are embraced. But one way to implement it has been suggested before. In an address on the rôle of the states in the atoms-for-peace program, given before the atomic energy committee of the Mineral Law Section of the American

Bar Association at its June 29, 1956, meeting in St. Louis, the author suggested a practical course that, if followed, might have avoided some of the problems raised by the granting of the AEC's conditional construction permit for the Lagoona Beach reactor, without first consulting the authorities of the state involved.

THAT course is based on the concept embodied in the Anderson Bill, S 4298, introduced July 26, 1956, which calls for the addition of a new section to the Atomic Energy Act of 1954, to be enumerated § 274, with the heading "Executive Co-operation with States." If enacted, the Anderson Bill would authorize the AEC to negotiate compacts with the several states, and submit them to the Congress for approval, when they related to the health and safety aspects, and other aspects, of the atomic energy program, and to co-operate with the states in the formulation of standards in those fields.

Under the proposed Anderson Bill, when a state is found by the AEC to be competent to exercise jurisdiction in a particular regulatory field, the AEC would be empowered to relinquish jurisdiction in that field to the particular state. Areas of jurisdiction would be determined by the compacts, since the bill specifically provides that they "may include provisions delineating the separate responsibilities of the commission and of the states." The constitutional basis for that is the Compact Clause of Article I, § 10, Clause 3.

In connection with the jurisdictional problems attendant reactor location, and bearing in mind the provisions of § 272 of the act subjecting reactors transmitting or selling power in interstate commerce to the regulatory provisions of the Federal Power Act, and likewise bearing in mind the judicial interpretations of that act referred to above, if reactors were located only on federal ground, secured by the AEC after the state in which the ground was located had released all jurisdiction over it to the federal government, it should be apparent that much legal difficulty would be avoided. The following should make that clear:

UNDER Article I, § 8, Clause 8 of the Constitution, Congress has the power to "promote the progress of science and useful arts." Under Article I, § 8, Clause 17, it is accorded exclusive jurisdiction over all ground purchased by the federal government, with the consent of the state in which the ground is located, "for the erection of forts, magazines, arsenals, dockyards, and other needful buildings." Surely, under our "atoms-for-peace" program a power reactor licensed by the federal government and using government-owned special nuclear material as fuel, and whether engaged in the generation of electric power transmitted or sold in interstate commerce or not, is a "needful building." And, as has been stated, Article I, § 10, Clause 3 of the Constitution authorizes the federal government to enter into compacts with the states.

Under the authority of those three constitutional provisions, and by an amendment to the Atomic Energy Act of 1954, Congress could invite the states to participate with it in its reactor program by entering into compacts with the federal government whereunder such private industry reactors as might be located within the state would be considered as "needful buildings," essential to "promote the progress of science and useful arts." Such reactors could be located on ground purchased by the federal government under terms of sale whereby it would have jurisdictional control to the exclusion of the particular state. Such ground could then

be leased back to the private industry operator.

That would leave jurisdictional control in the federal government, over zoning as well as reactor design, and over all other aspects of reactor operation. But it need not always remain there. Jurisdiction could always be granted back to the particular state, by compact under the Anderson Bill, if such was desired. But the initial jurisdictional problem attendant location would have been solved.

THUS, much of the uncertainty attendant the present status of the states in the reactor program would be dispelled. And an invitation to the states to join with private industry in the federal government's reactor program would have meaning. The Atomic Energy Act, which as Workshop I reported gives "rather unsatisfactory treatment to the problem," would be made to fit our dual system of government in a way that would permit far greater acceleration of the reactor program than is at present the case.

Furthermore, the public utility industry, as well as its legal counsel, would be spared many headaches in the years to come.

—J. RAYMOND DYER, ESQ.
St. Louis, Missouri.

New Book on Government Regulation of Business

A VOLUME in the general field of government regulation of business has recently made its appearance. And it is the considered judgment of this reviewer that it is a valuable addition to the library of both the regulatory commissioner and the regulated utility businessman. It should prove equally valuable to economists, lawyers, educators, accountants, and others who have an interest in this special field of political economy.

As the name implies *"Public Control of Economic Enterprise,"* by Professor Harold Koontz, School of Business Administration, University of California (Los Angeles), and Professor Richard W. Gable, School of Public Administration, University of Southern California, is not only impressive in the vast scope of its coverage, but also exceptionally well done in the two out of eight "parts," which are devoted, respectively, to transportation and public utilities. Such an ambitious undertaking, of course, necessitates a big book (851 pages). But it might be said that the "large economy size" is well worth the $7 asked by the McGraw-Hill Book Company, Inc., publishers.

A mere recital of some of the other "parts" of the Koontz-Gable volume will give the reader an idea of the awe-inspiring task to which the two California professors addressed themselves. These include (in addition to transportation and public utilities already mentioned) a review of the philosophy of economic control, maintaining competition, protecting the investor, the labor factor, public promotion and ownership of economic enterprise, public control of the total economy. In other words, wherever the hand of government has touched private business (utility or otherwise), Koontz and Gable have analyzed the prevailing mechanics adequately and accurately. In addition, there are a list of cases and a good subject index.

THE section on public utility regulation, which covers 96 pages, does not contain material that would be exactly novel to the well-read student of public utility

regulation. But when considered within the framework of the total Koontz-Gable volume, these authors have done a surprisingly good job of synthesis, in what every one knows is a rather complex field. The subject is handled in the traditional chronology, stemming back to Lord Hale's dictum and the early American decisions on the public utility status. It traverses standardized fields of state commission jurisdiction—rates, service, securities, and the problems peculiar to the specialized economics of the major utility industries, gas, electric, and telephone.

Holding company regulation and finance are given an enlightening chapter by themselves. Some idea of the balanced and objective approach of these authors may be seen in the following passage from their conclusion about the classic controversy concerning the utility rate base:

> Many of the state and federal commissions have long resisted the mandatory reproduction cost rule. Hereafter, unless restricted by statutory or constitutional limitations, the commissions may determine their own formula for rate making, and its validity depends upon its effect "viewed in its entirety." Where state law requires it, of course, reproduction cost will continue to be used. But regulatory commissions in the remaining states may now base their rate orders on other evidence, which can be assembled and presented more quickly, at less cost, and which is generally deemed more satisfactory than evidence based on reproduction figures. Even though original cost or prudent investment methods may be subject to shortcomings from an economic point of view, they do have the administrative advantages of being convenient and workable and are being favored today. The economic drawbacks might be eliminated if commissions would keep in mind the fact that a fundamental purpose of regulation is to see that rate levels are kept high enough to maintain, under efficient management, the standards of service demanded by the public.

THE reader, whose principal interest is in the utility field, will be impressed in perusing this volume by the activity of government controls in other fields of business economics—the work of the Federal Trade Commission, the National Labor Relations Board, the general aids to business and the impact of social security legislation, to name but a few. What started in this country, less than a century ago, with a few elementary forms of controls over a handful of so-called companies "charged with the public interest," has grown and multiplied to the point where no part of our economy today is free of substantial influence by government regulating bodies, very often by two or more of them.

The reader will also find of special interest the part (88 pages) on government ownership and control of business, including such matters as the TVA. Koontz and Gable proved themselves rugged skeptics of the over-all advantages of government ownership in the long run. There is also some thought-provoking commentary, in the final chapter on general conclusions, especially the remarks about public control and the future, which is about as near as these authors come to outright editorializing.

—FRANCIS X. WELCH

The March of Events

Companies Join in Atomic Power Venture

E. H. WILL, president of Virginia Electric & Power Company, announced recently the formation of Carolinas Virginia Nuclear Power Associates, Inc., a nonstock and nonprofit corporation organized under the laws of the state of North Carolina for the promotion of atomic power in that area. The new corporation is composed of four large southern electric utility companies, the Virginia Electric & Power Company, Carolina Power & Light Company, Duke Power Company, and South Carolina Electric & Gas Company.

The organization plans to erect a multimillion-dollar reactor somewhere within the service area of the sponsoring companies and will conduct substantial research in the field of nuclear power. Principal office of the company will be in Charlotte, North Carolina.

The president of the new corporation is Norman A. Cocke, president of the Duke Power Company.

AGA Officers Elected

AT the annual convention of the American Gas Association held in Atlantic City last month, the following officers were elected:

C. H. Zachry, president, Southern Union Gas Company, Dallas, president; A. W. Conover, president, Equitable Gas Company, Pittsburgh, first vice president; Robert W. Otto, chairman of the board, Laclede Gas Company, St. Louis, second vice president; and Vincent T. Miles, treasurer, Long Island Lighting Company, Mineola, New York, treasurer.

Fifteen executives from gas utility, pipeline, and appliance manufacturing companies were elected directors for two-year terms.

California

Named to Utilities Commission

GOVERNOR Knight recently appointed C. Lyn Fox, veteran San Francisco newspaperman, to the state public utilities commission.

Fox succeeded Justus F. Craemer, who retired at the end of October.

The term runs to January 1, 1957, and carries a $17,000 annual salary.

The appointment was subject to senate confirmation.

Georgia

Power Company Purchase Approved

DIRECTORS of the Georgia Power Company recently approved purchase of the Georgia Power & Light Company, a move that was expected to bring lower power rates to 19 south Georgia counties. Estimated purchase price was $16,500,000.

The proposed transaction, subject to approval by the Federal Power Commission and the Securities and Exchange Commission, was also said to be contingent upon Georgia Power obtaining franchise from municipalities in the area.

E. A. Yates, chairman of the board of The Southern Company, made the following statement regarding the proposed purchase of the properties by Georgia Power Company, a subsidiary of Southern:

> For many years Georgia Power Company has supplied electric service in approximately three-fourths of the state of Georgia. Legislators and other governmental officials and citizen groups have repeatedly urged that the properties of the Georgia Power & Light Company, operating in a 19-county area in the southern part of the state, be acquired.
>
> The agreement which has been reached between the two companies will make possible the eventual extension of service and the application of uniform statewide rates to that territory if approved by state and federal regulatory agencies. However, rates in the new territory cannot be equalized with those of Georgia Power Company until a new source of power supply has been developed, now estimated for completion in 1960 or 1961.

Mr. Yates said it was not likely that the necessary regulatory approval and other details of the purchase "can be completed earlier than January 1, 1957."

Rush on for State Gas Certificates

TRIGGERED by an act of the 1956 state legislature, a rush for certificates to serve Georgia areas with natural gas has developed. Hearings on the various applications have been scheduled for November.

Commission records late last month showed that applications had been filed by five gas companies and six municipalities. The applications were reported to reveal at least 24 areas of possible conflict.

The 1956 legislature passed an act requiring a certificate of convenience and necessity from the state public service commission for all pipelines in the state. Under a so-called "grandfather" clause, existing companies are entitled to certificates for present facilities. However, the commission adopted a rule requiring a hearing even for the "grandfather" clause certifications.

Kentucky

Commission Sets Fee

THE state public service commission last month established a $50 fee for a new set of customers tapping natural gas pipelines. It set their minimum monthly charge at $1.60.

In compliance with a law passed by the 1956 state legislature, the commission set

rates for: (1) owners of property on which gas wells and pipelines are located; (2) persons living within half a mile of producing wells or pipelines.

They will be charged 80 cents per Mcf for the first 2,000 cubic feet, 60 cents per Mcf for the next 28 Mcf, 50 cents per Mcf for the next 580 Mcf, and 40 cents per Mcf for all over 600 Mcf.

Customers whose service is discontinued for nonpayment of bills will pay $5 for restoration of service.

Oklahoma

GRDA Needs More Bonding Power

DIRECTORS of the Grand River Dam Authority recently received an engineering report indicating the agency would have to ask the state legislature for permission to increase its bonding capacity by $40,000,000 in order to carry out its plans for building Markham Ferry dam.

The report, drawn up by R. W. Beck and Associates of Columbus, Nebraska, showed that the Markham Ferry dam project would require $26,619,000, taking up all the unused bonding capacity the GRDA now has.

Special counsel for the GRDA told the directors bonds to build the project cannot be sold until the state legislature votes the state-owned agency permission to sell bonds to install pump turbine units as needed.

Rhode Island

Refund Complaint Dismissed

IN a decision made public recently, the three-member state public utility hearing board dismissed for lack of jurisdiction a complaint asking it to compel the Providence Gas Company to refund to its customers between $1,400,000 and $1,500,000 in collections made after conversion to natural gas.

The complaint came before the board on appeal from a decision of Thomas A. Kennelly, public utility administrator, who had denied it.

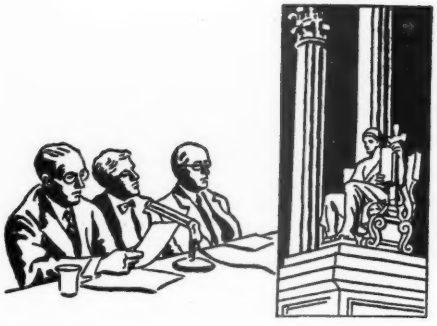
The complainants argued that a 9 per cent rate increase authorized by Mr. Kennelly in 1953 had been intended to apply only while customers were receiving manufactured gas during the conversion period.

Washington

PUD's Propose Power Projects

PLANS for construction of five power projects having a total capacity of 243,000 kilowatts were announced recently by a group of 17 public utility districts. The districts disclosed their plans in an application to the state director of conservation and development for authority to join forces in a new state agency to be known as the Washington public power supply system.

The proposed power projects are: a 200,000-kilowatt steam plant, location not yet determined; a 10,000-kilowatt hydroelectric plant at the mouth of the Hamma Hamma river on Hood canal; a 16,000-kilowatt hydroelectric plant on the south fork of the Skokomish river near Index; a 5,000-kilowatt project on May creek at the outlet from Lake Isabel in Snohomish county; and a 12,000-kilowatt hydroelectric plant on Lake creek at the outlet of Packwood lake in Lewis county.



Progress of Regulation

Trends and Topics

Duty to Serve in the Face of Picketing and Violence

RECENT strike violence in several Ohio communities, resulting in the suspension of telephone service by the Ohio Consolidated Telephone Company, raises a question of the extent of a public utility's duty to furnish service in the face of picketing and strike violence. The decisions on the subject necessarily involve, in some measure, individual value judgments respecting the immediate public need balanced against opposing labor demands, with attendant social and economic implications.

The United States Supreme Court has just refused to review a case relating to the use of harassing tactics by a union to bring an employer to terms. Such tactics include unannounced walkouts, slowdowns, refusal to work overtime, and other partial-strike methods. The action of the high court leaves in force a lower court ruling which overturned a National Labor Relations Board decision banning these tactics. Although the case did not involve a public utility, it is interesting to speculate how a utility's duty to serve might be affected by a harsh harassing campaign. How far might such coercion be allowed to interfere with utility service?

Judicial injunctive power in labor disputes is, of course, limited by federal law as well as by many state statutes.

While the cases dealing with the service obligation as affected by labor disturbances are not numerous or comprehensive, a few of them may serve to illustrate some of the problems that have arisen, and also to point up some principles applied in their solution.

Electric, Gas, and Telephone Service Withheld

In a 1946 proceeding, the New York commission refused to compel an electric and gas company to provide service to a new housing development on the ground that a labor dispute was involved, which other tribunals could more appropriately handle. There was no strike against the company or home owners in the development, but the company's employees declined to cross a picket

line established at the development by a construction union. The company made only token efforts to discharge its service obligation.

While the commission noted that the company was bound under the state statutes to furnish service, it indicated, on the other hand, that the utility also had a duty to protect its employees from embarrassment respecting violations of their union obligations—that is, from crossing picket lines. The case was dismissed with the observation that the company could not be excused from its service obligation "until it has made a thorough effort to have the matter in controversy determined by an appropriate tribunal" (62 PUR NS 1). A court proceeding by one of the home owners initially resulted in an order directing the company to furnish service and enjoining the union from interfering (62 PUR NS 245). However, upon appeal this decision was reversed on the ground that the case involved a labor dispute and was controlled by a labor injunction statute which had not been complied with (62 PUR NS 248).

Somewhat similar was an earlier New York case. A telephone company denied service to about 500 applicants living in an apartment development owned by a landlord who refused the company access to the premises to install telephone facilities. A jurisdictional dispute existed between an electrical union and the company employees' union over the installation of telephone cables, and the landlord was threatened with a strike if the company were allowed to do the work. The company made no real effort to secure access to the premises.

The commission observed that the crux of the matter was a labor dispute and disclaimed jurisdiction either to restrain the landlord or to compel the company to provide service. It indicated, however, that the company must proceed promptly to have its right to enter the property determined by a proper court (37 PUR NS 173).

Service Curtailment during Coal Strike

During the 1946 coal strike, electric companies were confronted with the problem of curtailing service. The Illinois commission directed that the curtailment be administered in such a manner as to prolong the supply of service essential to public health and safety. The commission cannot by broad authorization delegate its duty to insure that public utilities do not discriminate among customers with respect to administering a necessary curtailment of service. It must be done under the commission's supervision (63 PUR NS 129; 63 PUR NS 136). Gas service beset by a restricted supply as a result of a strike must, of course, be similarly curtailed with a view to prolonging service to the most essential public needs (62 PUR NS 181).

Strike Violence and "Impracticable" Operations Tariffs

Railroads and motor carriers, halted by picket lines and violence, have found themselves defendants in actions at law by shippers claiming damages for losses resulting from failure of transportation service. "Impracticable" operation tariff provisions, approved by the Interstate Commerce Commission as well as by state commissions, are often invoked as a defense. "Picket line

clauses" (provisions against requiring an employee to cross a picket line), contained in some carriers' labor contracts and recognized by the Labor Management Relations Act of 1947, have also been asserted.

A very recent case decided by a federal court of appeals involved both railroads and motor carriers. A furniture plant was picketed and when the strikers became violent the carriers discontinued pick-up and delivery service. They pointed to tariff provisions which purported to excuse them from providing service when it should become impracticable because of strikes or other labor disturbances.

Citing the violence which attended the picketing at the plant, the court upheld a ruling that the carriers were excused under their "impracticable" operations provision "by reason of violence and threatened violence on the picket line."

An employer is not required, the opinion declared, to subject its employees to risks of injury in discharging its duty to furnish transportation.

But a "picket line clause," the court indicated, does not necessarily preclude a strike-bound plant from making a "reasonable request" for transportation, within the scope of the service obligation imposed upon interstate carriers by federal law. Nor will refusal by an employee to cross a picket line furnish a carrier a defense under an impracticable operations clause even though the employee is protected by a picket line clause (15 PUR3d 99, 233 F2d 296).

Carrier Service Interruption by Peaceful Picketing

What would the court's decision have been in the last-mentioned case if the picketing had been peaceful? The Interstate Commerce Commission has held in such a situation that the carrier was excused under an impracticable operations provision (42 ICC 225). To the contrary, however, is a federal district court decision (128 F Supp 475).

The Washington supreme court said, in a 1940 motor carrier case, that an impracticable operations provision "clearly refers to the conditions at the picket line."

The carrier was not released from its service obligation to a shipper whose premises were peacefully picketed (31 PUR NS 186). The commission decision in the same case, upheld by the court, declared that the carrier was bound to make every reasonable effort to obtain drivers who would go through the picket line, notwithstanding a threatened strike by its own employees (27 PUR NS 14).

Transit companies halted by an employee strike are bound to exert every reasonable and lawful means to settle the strike and resume service. But the California commission recently indicated that it would not order a transit company to resume service where such an order might involve or invite the use of strikebreakers (1 PUR3d 150).

Review of Current Cases

Federal Court Refuses to Upset FPC Licensing Of Dams in Hell's Canyon

ATTACKS on the order of the Federal Power Commission in Re Idaho Power Co. (1955) 9 PUR3d 405, authorizing the construction of a hydroelectric power project, were rejected by the federal court of appeals. Public utility districts and others had opposed the grant to Idaho Power Company on the ground that it was the duty of the commission, under § 7(b) of the Federal Power Act, to decide that the United States itself should undertake the development and to recommend that Congress provide for governmental construction of a single high dam in Hell's Canyon, such as had been suggested several years before by the Army Corps of Engineers and by the Reclamation Bureau of the Department of the Interior. They further contended that the 3-dam plan proposed by Idaho Power was not, within the meaning of § 10(a) of the act, "best adapted to a comprehensive plan" for developing the water resources of the Hell's Canyon reach for public purposes.

Limitation on Review

In answer to the petitioners' contention as to the dam best adapted to a comprehensive plan, the court observed that the admonitions to the commission contained in § 7(b) become effective only when "in the judgment of the commission" the development should be undertaken by the government. In like manner § 10(a) provides that any license issued shall be on condition that the project adopted shall be such as "in the judgment of the commission" will be best adapted to a comprehensive plan for developing the water resources for beneficial public uses.

The recurrence of the quoted phrase, said the court, emphasized the broad discretion as to these technical matters which Congress had committed to the commission. Judgment upon conflicting engineering and economic issues was said to be "precisely that which the commission exists to determine." The court cited the Supreme Court decision in the Roanoke Rapids Case (97 PUR NS 129).

Accordingly, said the court, its review of the commission's orders was quite limited in scope. When the court has determined whether the agency violated constitutional or statutory provisions, and whether its decision had a substantial basis in the evidence considered in its entirety, the court is "done."

Comparison of Plans

The commission conducted what was in effect an adversary hearing for the purpose of comparing the privately proposed 3-dam plan with the single high dam installation which had been suggested. Many experts had testified, and there was a great mass of proof. The commission concluded that the public purposes, such as flood control, navigation, and recreation, could be effectuated to about the same extent under either plan of development.

The commission regarded it as essential, in deciding between the two plans as to power production, to compare the economics of the proposals. The petitioners insisted that the two proposals should be compared on the basis of private construction of the 3-dam installation and federal construction of the one high dam, from which it would follow that the power from the latter could be marketed at a much lower cost due to the government's

superior credit and its freedom from taxation.

The court said that if this were the criterion under § 7(b), federal development would invariably be preferable and the commission's authority to issue licenses to private applicants could never be exercised without first recommending the proposals for federal construction and waiting for two years to see whether Congress would authorize the work. This seemed contrary to the legislative intent, as § 7(b) requires the commission to recommend federal development only when "in the judgment of the commission" the work should be undertaken by the United States itself.

The phrase relating to judgment of the commission, the court continued, was read out of the statute if the commission must recommend every development for federal construction simply because the United States has better credit than any private applicant and is free from taxation.

The commission had finally concluded that neither plan was more comprehensive than the other in the public purposes to be served; and that the fact that the single high dam would produce these public benefits in somewhat greater quantity than would the private proposal did not justify the formation of a judgment that the United States should undertake the former, in view of its greater cost and the improbability of its early authorization. Thus the commission chose between a $400,000,000 plan, which nobody was offering to undertake, and another comprehensive development for which private capital in the sum of $175,000,000 was immediately available, so construction could begin at once.

Under these circumstances the court adhered to the Supreme Court ruling in the Roanoke Rapids Case that it should not tell the commission what it thought—to say to the commission that it was its judgment that the dam should be built by the government. Primary responsibility must remain with the commission. The court could not infer a judgment of the commission that it never expressed and which it specifically disavowed.

Comprehensive Plan

The petitioners contended that the federal dam was best adapted to a comprehensive plan within the meaning of the law.

They seemed to regard the high dam suggestion as a federally adopted comprehensive plan which bound the commission to hold it to be "best adapted" for the purposes of § 10(a). The word "comprehensive," said the court, was not superlative in significance. The 3-dam proposal and the single high dam suggestion had been found equally comprehensive as to the achievement of public purposes.

The court doubted whether § 10(a), which attaches conditions to the issuance of a license under § 7(e), was intended by Congress to require the commission to compare a suggested but rejected federal plan with pending private proposals, to see which is "best adapted to a comprehensive plan" of development. Such a comparison is made under § 7(b) when the commission decides whether in its judgment the United States should undertake the construction and, in doing so, of course employ standards which include those set out in § 10(a). The act, said the court, must be read and applied as a whole. *National Hells Canyon Asso., Inc. et al. v. Federal Power Commission, Nos. 12,-988, 13,160, October 9, 1956.*

Telephone Company Wins Injunction against Inadequate Ordinance Rates

THE Texas supreme court, reversing lower court holdings, ruled that a telephone company was entitled to an injunction to prevent the enforcement of inadequate rates fixed for the city of Wellington under statutory authority. The company had applied for adequate rates without success. The authorized rates afforded a return of less than 2 per cent. In the face of a penalty ordinance, the company proposed to collect "fair and reasonable" charges until such time as the city might prescribe proper rates. An adequate bond was offered.

Unit Operation and Return

The telephone exchange system serving the city was a unit operation which also served suburban areas. The council's ratemaking authority extended, of course, only to the city limits, and the rates complained of applied only to urban service. Telephone rates outside the city limits were not prescribed by a governmental body.

The city contended that the injunction could not be issued because, as it urged, inadequacy of the return from city rates was not sufficiently shown by the company's evidence relating to the entire community exchange operations. It was asserted that the company should have segregated its community operations into urban and suburban divisions in proving inadequacy of return.

The court rejected this position. The single exchange system for the whole community had always been in actual use, and a different system of operation and accounting, the court indicated, would be unnatural. In making a case of inadequacy of return, the company need not present "some type of wholly theoretical and necessarily complicated accounting 'breakdown' of its single operation into two operations divided in some undefined fashion on a basis of city limit lines." This is particularly true of a telephone utility, for the transmission of messages throughout an exchange area does not lend itself to division or allocation by arbitrary lines.

The commodities sold by electric, gas, or water utilities, on the other hand, are more easily measured and sales can be more effectively localized. But to find a practical basis for splitting up a naturally indivisible telephone exchange operation into subunits following city lines would seem almost impossible, said the court. Where a community exchange flat rate system is the most natural and convenient form of operation, rates and returns ought to be determined upon the same basis.

Of course, continued the court, this is not to say that where two competing regulatory bodies divide a single community between them, or where there is a question of rate discrimination, any attempt at separation of returns is necessarily to be held improper or unnecessary, however theoretical or complicated the process may be. But the instant proceeding was not such a case.

Constitutional Guaranties

The court declared that, with or without a review statute, the failure of telephone rates to produce a fair return on the fair value of property devoted to public use is an enjoinable violation of constitutional guaranties, both federal and state, even though there is no confiscation in the sense of an out-of-pocket loss. Confiscation (producing net loss) and unreasonably inadequate rates (affording an unreasonably low net income) are to be treated as identical, for the purposes of constitutional protection. A rate of return

of less than 2 per cent, as the uncontested evidence showed in this case, obviously qualifies as unreasonable, the court ruled.

Discretion of Trial Judge

A fundamental question, the court pointed out, is whether, regardless of the foregoing considerations, the refusal of the injunction by the trial judge is to be upheld on a general principle of discretionary authority. The area of discretion is usually one involving a matter of deciding the facts upon conflicting evidence, or one of judgment about imponderables such as future facts, or the balancing of equities. But discretion does not extend to the erroneous application of law to undisputed facts. "A temporary injunction will issue," said the court, "when three things are made to appear: (1) that there is a reasonable probability that the utility will succeed on final hearing, (2) that the loss to the utility resulting from a refusal to grant the temporary injunction will be irreparable, and (3) that the customers can be adequately protected by bond."

Because of the inadequate return, the first prerequisite was present in this case; the inability of the company to make up lost revenues from inadequate rates furnished the second prerequisite; and the offering of an ample bond fulfilled the third. In exercising his discretion, the trial judge applied two erroneous holdings: that the rate ordinance, as well as a penalty ordinance, posed no threat of enforcement, and that as a matter of law the status quo to be preserved by the requested injunction was the ordinance rates under attack.

The company could not assume, without the benefit of judicial protection, that it could disregard the rate ordinance of the body designated by the legislature to fix rates. The issue on the proof presented was the validity of the rates sought to be enjoined and not those which were requested by the company. And the authorized rates were obviously inadequate under constitutional guaranties. *General Teleph. Co. of the Southwest v. City of Wellington et al. No. A-5395, October 3.*

In a companion case appealed by the same company and presenting similar facts and issues, except that the rates there complained of resulted in an out-of-pocket loss to the company, the court handed down an identical holding, again reversing the lower court. *General Teleph. Co. of the Southwest v. City of Eden et al. No. A-5481, October 3, 1956.*

Assumed Debt Ratio Used in Fixing Return Allowance

THE city council of the city of El Paso, Texas, authorized the Mountain States Telephone & Telegraph Company to increase rates for local exchange service within the city. The council has authority to fix rates for such service although it has no power to regulate rates for customers outside the corporate limits of the city or rates for intrastate or interstate toll service. The council held that the proper rate of return for the company on the fair value of its property used in rendering local service within the city is 6 per cent. It also held that the proper debt equity ratio in considering the cost of capital and the burden of federal income taxes is 40 per cent and 60 per cent of equity.

Current Cost Estimates

No true and complete reproduction cost estimate of the company's property within the city limits was available. The company introduced a valuation summary on its local property consisting of a trended original cost estimate on more than 30 per cent of the total plant and piecemeal re-

production of the original plant at 1955 prices for the remainder of the plant.

The city council found that these exhibits did not constitute reproduction cost of, or the present value of, the properties. It accepted them, however, as reflecting an inflation of the original cost of the property, and as useful in arriving at the present value, in accordance with the statutes and decisions of the state of Texas. The council found that by reason of the conversion from manual to dial operations and the rapid growth of the city, the telephone plant in service within the corporate limits is preponderantly new, that the book costs have doubled from 1949 to 1955, and that the original cost of the plant in service within the city, therefore, reflects material inflation and inflated costs. Excluded from the rate base were amounts for plant under construction, materials and supplies, and cash working capital.

Separations

The company's separations methods did not follow the Separations Manual promulgated by the National Association of Railroad and Utilities Commissioners, as amended by the Charleston Plan. The company's separation of plant, revenue, and expenses was deemed to be by the use of methods which are obsolete and discarded and which, therefore, produce results unfair and inequitable to local exchange subscribers within the city. *Re Mountain States Teleph. & Teleg. Co. August 31, 1956.*

Proposed Rate Increase Modified in View of Company's Sound Financial Condition and Disallowance of Working Capital

THE Nevada commission authorized Bell Telephone Company of Nevada to increase rates to yield a return of about 6.03 per cent on its intrastate operations. The company had sought an increase to restore its earnings to approximately 6.3 per cent. Rates yielding such a return had been authorized about three years ago. Since that time the company has been engaged in a vast expansion program. The commission found that the company was in sound financial condition with an overall return on both interstate and intrastate operations of 6.97 per cent.

The new construction program was financed by the sale of new stock or new investments. None of the stock was purchased by the general public but was exclusively bought and held by Pacific Telephone and Telegraph Company, which in turn is owned better than 90 per cent by American Telephone and Telegraph Company.

The latter company is financially stable, and only recently it proposed to sell nearly six million additional shares to its stockholders at $100 per share. The commission observed that it was not at all fearful of the ability of Bell Telephone Company of Nevada, or in fact Pacific Telephone and Telegraph Company and American Telephone and Telegraph Company, to finance any operation within reason which might come up.

Working Capital

The company's annual report for 1955 indicated a figure of $1,577,790 as the average tax accrued. For this reason the commission believed there was no need for having any separate items of working cash and materials and supplies. It noted that the company has the accrued tax money free, and with no interest, for its use during the year to carry on its operations.

It also pointed out that most of the local service revenue is paid in advance by the customers.

Extended Area Service

The company also proposed to introduce extended area service in Reno, Sparks, and Carson City. This would eliminate toll charges and messages between the exchanges and increase the value of service to subscribers. Its approach to this problem, however, was not altogether acceptable to the commission in that it attempted to balance off tolls and then raise tariffs to compensate for the loss in tolls. The commission said that in the rapidly expanding cosmopolitan area of western Nevada it would seem that the company's desire should be to give to its patrons in that area some of the benefits which would accrue to the company through the wonderful improvements in communications.

Testimony indicated that extended service could not soon be available. So, the commission said, any rate authorized at this time could not be effective until the service so extended is in operation. Then the rate schedule as finally adopted would have to be on an interim basis of at least one year in order that corrections could be made to the rate structure for this service if found necessary.

The commission said that since any improvements and extension of service will necessitate new equipment which becomes part of the plant, any rate on this type of service should be on the value of the plant so used and not on the desire to balance a toll deficiency against the cost of extended service. *Re Bell Teleph. Co. of Nevada, I&S Docket No. 178, August 21, 1956.*

Authority to Supply Natural Gas to Distributors Made Subject to Developmental Rate

In consolidated proceedings the American Louisiana Pipe Line Company and the Michigan Wisconsin Pipe Line Company were directed by the Federal Power Commission to sell and deliver natural gas to several distributing companies and municipal plants. All requests for service were judged under the requirements of § 7(a) of the Natural Gas Act.

Section 7 provides that the commission may, if it "finds such action necessary or desirable in the public interest," direct a natural gas company to establish physical connections and sell natural gas to "any person or municipality engaged or legally authorized to engage in the local distribution of natural or artificial gas to the public," if it finds that no undue burden will be placed upon such natural gas company thereby, provided that such action would not impair the ability of the company to render adequate service to its customers.

The criteria to be applied under the § 7(a) prescription of "necessary or desirable in the public interest" was held to include the questions whether the pipeline company is the applicant's most feasible source of supply; whether there is a public need for and there will be a public benefit from natural gas service in the areas involved; whether the project can be adequately financed; and whether it is economically feasible.

Developmental Rate Provisions

The commission observed that some of the applications for service from American Louisiana Pipe Line Company would not be feasible if feasibility were based on the tariff proposed by the pipeline com-

pany. That tariff called for a $2.90 demand and a 30-cent commodity rate, subject to a 75 per cent load factor minimum bill. Each of the applicants, however, proposed the addition of two more rate schedules to the single schedule proposed by American Louisiana; namely, a general service rate and a small general service rate with development periods.

It is not uncommon for natural gas companies to provide developmental rates or provisions in their tariffs on file with the commission. Such rates are generally intended to assist a new natural gas distributor or market area in converting to or initiating natural gas service. During the first few years there are conversion costs, abnormal sales promotion expenses, lower load factor of distribution system operations, and generally higher average purchased gas costs, which constitute an added burden for which provision can be made by a developmental rate.

In this way recognition is given by means of a developmental rate to the cost and other expenditures to be encountered in the first few years of operation which are not encountered in subsequent years. The commission found it necessary and appropriate, therefore, to require American Louisiana, with its assured market of sales to Michigan Consolidated Gas Company and Michigan Wisconsin Pipe Line Company, to file a developmental rate to assist in the development of the natural gas market of the § 7(a) applicants and interveners which it might find it in the public interest for American Louisiana to serve.

The commission held that the appropriate rate schedule to be filed for such sales should provide for a straight rate of not more than 43 cents per Mcf for each monthly billing period for a developmental period of thirty months from the initiation of deliveries to each applicant. Such a rate is approximately equal to the average charge for natural gas taken at 70 per cent load factor at prices of $2.90 per month per Mcf of billing demand and 30 cents per Mcf commodity. The commission cautioned, however, that its specification of such rates was not to be construed as indicating any acceptance of those prices as constituting just and reasonable rates. *Re American Louisiana Pipe Line Co. et al. Docket Nos. G-2306 et al. September 4, 1956.*

Natural Gas Rate Filing Abrogates Lower Contract Rate

THE Federal Power Commission has upheld the filing by United Gas Pipe Line Company of a natural gas rate increase displacing a previous contractual rate. Some of the company's customers objected to the new rates on the ground that the tariff filing constituted a unilateral change in the "contractual rate" which is prohibited by Supreme Court decisions in United Gas Pipe Line Co. *v.* Mobile Gas Service Corp. (1956) 12 PUR3d 112, and Federal Power Commission *v.* Sierra Pacific Power Co. (1956) 12 PUR3d 122. The commission disagreed, concluding that the contract language supplied the purchasers' assent to the filing of new rates.

Service Agreement Distinguished

The commission distinguished the service agreements in this case from those in the Mobile and Sierra cases. In the latter cases, the Supreme Court had before it the narrow question of the right of a natural gas company or a public utility by unilateral action to change a definite and specific rate fixed for a definite and specific term of years by contractual agree-

ment. In the Mobile Case it held that a specific contract rate so fixed could not be changed by a unilateral filing pursuant to § 4(d) of the Natural Gas Act.

In the Mobile Case, the rate for the gas was specifically stated and firmly fixed for the full 10-year term of the contract. Nothing was contained in the contract which indicated either directly or by implication that the rate could be changed by unilateral action of the pipeline company. Unless the purchaser consented to a change in the rate United was bound by the obligations of the contract. Such was the view of the Supreme Court on the facts in that case.

But the provisions of the several service agreements between United and its customers in the present case were materially different. The agreements did not fix an absolute or static rate. Rather, they simply provided that the rate to be charged should be the effective rate on file from time to time with the Federal Power Commission. The pricing provisions in the service agreements read as follows:

> All gas delivered hereunder shall be paid for by buyer under seller's rate schedules [here is inserted the designation of the appropriate schedules as contained in the filed tariff], or any effective superseding rate schedules, on file with the Federal Power Commission. This agreement in all respects shall be subject to the applicable provisions of such rate schedules and to the general terms and conditions attached thereto and filed with the Federal Power Commission which are by reference made a part hereof.

The commission decided that the words "or any effective superseding rate schedules, on file with the Federal Power Commission" clearly contemplate the understanding and intent of the contracting parties that the changes could properly be made by United in the rates contained in the applicable rate schedules in effect at the time of execution of the service agreement. It believed it was equally clear that it was the understanding and intent of the parties that the purchaser would pay the rates set out in the applicable rate schedules effective from time to time and that changes could be made therein by United under the procedures established under § 4 of the Natural Gas Act.

The commission said that unless the language of the agreements be so interpreted, it could only be concluded that by such language the parties intended merely that the first effective rates would continue in effect until changed by the commission under the provisions of § 5(a) of the Natural Gas Act. Such interpretation would imply that the parties were merely agreeing to comply with the act and the commission orders thereunder. Since they are under obligation to do so anyway, such an interpretation would deprive the contractual provisions of meaning and substance. This, the commission said, would be improper and should not be done.

Actions of the Contract Parties

The action of the parties under the contracts was also considered. The commission pointed out that except for the Mobile Case and the petition of Tyler Gas Company, which is a subject of a separate consideration and order, not one of the many purchasers under contracts with United contended prior to the decision in the Mobile Case that the rate filing of United here under consideration, or any prior change in rates, was in contravention of the provisions of the contract. Nor did they contend that United did not have the right under their several contracts to make a unilateral change in the first effective price thereunder, or that the changes

were made contrary to the purpose and language of the contracts.

The commission concluded, therefore, that these customers were of the belief that their agreements gave United the power to make unilateral changes in the existing rates pursuant to § 4(d) of the act. *Re United Gas Pipe Line Co. Opinion No. 295, Docket No. G-9547, October 2, 1956.*

Charge for Mixed Gas to Reflect Heat Content

THE Florida commission authorized a gas company to manufacture and distribute an interchangeable mixture of carbureted water gas and reformed propane gas with a heat content varying from 505 to 610 Btu per cubic foot. It also allowed the company to change its billing method by applying a multiplier in the ratio of the average Btu distributed to 505 Btu to the consumption as indicated by meter readings. The company would then apply existing rates on the basis of the adjusted consumptions.

The company sought authority to use a multiplying factor which neither increases nor decreases the amount of money paid by consumers for heating units or Btu served but which results in the consumers paying an identical amount of money for the number of heating units or Btu consumed.

The commission believed that the application of a multiplying factor in the ratio of the average Btu to 505 Btu to the volumetric consumption as recorded by meters, and the application of existing rates to all volumetric consumptions so adjusted, would accomplish this purpose.

The average Btu would be the average of the daily Btu for the month ending the twentieth day of the month immediately preceding the billing period. *Re Florida Pub. Utilities Co. Docket No. 4858-GU, Order No. 2389, September 28, 1956.*

Segregation Statutes and Ordinances Declared Unconstitutional

THE United States district court held that statutes and ordinances requiring segregation of white and colored races on motorbuses in Alabama violated the due process and equal protection clauses of the Fourteenth Amendment to the federal Constitution. The court stated that it could not, in good conscience, perform its duty by blindly following the precedent of Plessy *v.* Ferguson (1896) 163 US 537. The separate but equal doctrine could no longer be safely applied, as a correct statement of the law to public carrier transportation within the city of Montgomery, Alabama, and its police jurisdiction. That doctrine could not be justified as a proper execution of the state police power.

Commission Members Made Party Defendants

The members of the Alabama Public Service Commission objected to their joinder as parties defendant and moved to dismiss the action as against them, claiming that they had no jurisdiction over the buses which were being operated within the city of Montgomery and its police jurisdiction. The court denied the motion, holding that a state statute expressly imposed on the commission the duty of administering and enforcing segregation

requirements. The president of the commission had acted positively and affirmatively to that end, by notifying the transportation company that it must adhere to the segregation laws. *Browder et al. v. Gayle et al. 142 F Supp 707.*

Unsecured Promissory Notes Issued for Working Capital and Construction Funds

THE Missouri commission authorized an electric company to issue unsecured promissory funds after finding that the notes were necessary to provide working capital and to finance, in part, currently planned construction. The purposes for which the notes were to be issued were not reasonably chargeable to operating expense or to income.

The company preferred to use the proposed short-term method of financing rather than to enter into long-term commitments at a time when interest rates were higher than they had been for many years. These notes will subsequently be funded with proceeds of long-term obligations after completion of the company's construction program. Management of the company anticipates that interest rates will be lower at that time.

Evidence indicated that the percentage of the total capitalization represented by the company's common stock, preferred stock, and retained earnings was 48.86 per cent, with a long-term debt accounting for the balance of 51.14 per cent. After the proposed financing, these percentages are: common stock, preferred stock, and retained earnings, 37.48 per cent, and long-term debt, 62.52 per cent. *Re St. Joseph Light & P. Co. Case No. 13,493, September 20, 1956.*

Construction of Electric Steam-generating Plant in Residential Zone

THE Connecticut Public Utilities Commission, on appeal by property owners, upheld an order of a town zoning commission granting an electric company a variance to construct a steam-generating plant in a residential zone. The site, which was already owned by the company, was near the center of the area to be served and afforded ample water, space, and right of way to meet all needs of the plant. Moreover, it would enable the company to enjoy substantial savings in construction costs. As a condition to allowing a variant use of the site, however, the zoning commission imposed restrictions intended to minimize as much as possible the objectionable features of such a plant.

A number of objections to the proposed construction were interposed by property owners in the area. They urged that other sites than the one chosen could be obtained, noting that the company had not proved otherwise. The commission said the company was not bound to prove that no other sites were available. Such a burden would be an onerous one and might unduly delay construction of needed generating facilities. The commission observed that it must deal with this appeal as a matter of public utility regulation rather than zoning. That the site was the most suitable for the purpose was not refuted.

Jurisdictional Objections

Because of the time lag between the zoning commission's consideration of the

case and the utilities commission's hearing, it was contended that the latter commission was in effect considering issues that were not before the zoning commission.

This argument was rejected on the ground that the hearing on appeal was *de novo;* that is, a new and complete hearing in itself, as required by statute.

Minor procedural objections going to the utilities commission's jurisdiction were advanced, but they were found to be without substance. The commission pointed out that the opponents of the proposed construction were in no position to challenge the commission's jurisdiction while invoking it to obtain relief from the zoning order. A final contention that the chosen site should be reserved for the construction of an atomic plant when such plants shall have proven economically feasible was also rejected. *Harbor View Co. et al. v. Connecticut Power & Light Co. Docket No. 9077, October 3, 1956.*

Stand-by Charges for Municipal Water and Sewer Service Must Apply to All Benefited Properties

A MUNICIPAL water and sewer plant was authorized by the Wisconsin commission to establish stand-by charges to property not connected but for which facilities have been made available. The city requested authority to establish charges applicable only to improved property. This was disallowed, however, on the ground that it would constitute unlawful discrimination. Stand-by charges must apply to all benefited properties, according to the commission.

The commission observed that the applicant may have been interested in the establishment of the charge to serve as a penalty for failure to connect improved property to the water and sewer facilities. The commission held, however, that the purpose of the governing statutes is not to make possible such penalties. It pointed out that the city has the power to enforce connection of improved property. *Re City of Mondovi, 2-U-4653, September 13, 1956.*

Insurance Coverage at No Cost to Shipper Makes Carrier Guilty of Violating Minimum Rate

THE California commission found that a household goods motor carrier had in effect been charging less than minimum rates. The carrier had provided shippers, without charge, insurance coverage on shipments. This permitted the shippers, said the commission, to obtain transportation of household goods and effects between points in the state at rates less than the minimum established by the commission.

The evidence respecting the sequence of events leading to the violations, together with the fact that all of the transactions were clearly reflected upon the carrier's freight bills, records, and accounts, indicated no attempt to conceal the transactions, thus mitigating against the cancellation of operating authority.

The mitigating circumstances, however, did not make the offense less serious in the commission's eyes. Variations of this character have an adverse economic impact upon transportation as a whole and frustrate regulation. Other carriers cognizant and observant of the rules and regulations are prevented from competing on a fair and equal basis.

While the carrier may not have knowingly and willfully intended to violate the law, it was nevertheless clearly negligent in not determining the applicable rules and regulations. In such circumstances, said the commission, negligence closely approaches willfulness. Such conduct would not be condoned. The carrier's permit to operate as a household goods carrier was suspended for five days. *Re Praeger, Decision No. 53262, Case No. 5648, June 19, 1956.*

Certificate for Helicopter Service Granted

A CERTIFICATE of public convenience and necessity to engage in air transportation of persons and property by helicopter between Chicago's O'Hare Field, Midway Airport, and Loop District was granted by the Illinois commission. Because of a prohibition against fixed wing aircraft between the airfields and owing to the lack of rapid public service transportation, transportation by helicopter appeared to be the obvious solution for airline passengers in the Chicago area. While airport limousine, taxi, and public bus transportation service were available, such ground services were often subject to delay because of congested highways, and had caused considerable inconvenience in the handling of baggage.

Utilizing Sikorsky 58 type helicopters on its proposed passenger schedules and continuing present mail schedules with S-55 type helicopters, the applicant estimated that with 50 per cent seat occupancy each hourly trip, it would annually carry 184,000 passengers for total annual passenger revenues of $706,272. In addition, it would receive regular compensatory mail pay which would reduce an annual operating deficit to approximately $380,000. This deficit would be absorbed each year by the Civil Aeronautics Authority by allowing an additional over-all compensatory mail rate pay on a per mile basis sufficient to cover over-all operating losses. *Re Chicago Helicopter Airways, Inc. No. 42876, September 6, 1956.*

Other Recent Rulings

Gas Regulator. In an action by a gas company against a city to compel the issuance of a permit to install a gas regulating station in a city street, a New York trial court ruled that the gas regulating station, which has for its purpose the regulation of gas pressure, is not a conductor, within the meaning of a statute authorizing the company to lay "conductors" in the city streets, and therefore the company would have to comply with city requirements pertaining to the permit. *Brooklyn Union Gas Co. v. Cashmore et al. 154 NYS2d 62.*

Authority to Issue Short-term Note. The California commission, dismissing for want of jurisdiction an application by a warehouse company for authority to issue a 30-day, unsecured promissory note, expressed the opinion that such a note payable in less than twelve months may properly be issued under the state law without the commission's approval. *Re Vernon Central Warehouse, Inc. Decision No. 53870, Application No. 38370. October 9, 1956.*

Controlling Stock Transfer. The Con-

necticut commission authorized a holding company to acquire controlling stock of a water company for cash and holding company stock, the payment being only slightly less than the book value of the acquired stock, where it appeared that a common management would effect operating savings, and that no unfavorable change in the financial status of the operating company would result from the transaction. *Re Ridgefield Water Supply Co. et al. Docket No. 9346, August 15, 1956.*

Debt Ratio. The Wisconsin commission, in authorizing a telephone company to issue first mortgage notes, said that the resulting debt ratio of 57.4 per cent was reasonable. *Re Bruce Teleph. Co., Inc. 2-SB-652, August 20, 1956.*

Stock Offering to Employees. The Wisconsin commission authorized a natural gas company to sell common stock to its employees for cash at a price per share of $2 less than the current market price, provided, however, that the sale price should not in any event be less than the par value. *Re Wisconsin Southern Gas Co., Inc. 2-SB-654, August 30, 1956.*

Dividend Restrictions. The Wisconsin commission, in authorizing a telephone company to issue first mortgage bonds, provided that the company's surplus should not be made available for the payment of cash dividends except in amounts equal to the periodic retirement of the principal amount of the bonds, where the company's 44.4 per cent debt ratio resulted from the inclusion in common stock equity of a relatively high percentage of surplus and a small amount of common stock. *Re Door County Teleph. Co. 2-SB-649, August 23, 1956.*

Crossing Cost Allocation. The Missouri commission refused to assess against a transit company any of the cost of reconstructing a viaduct, where the company had ceased using the viaduct and therefore did not contribute to the need for reconstruction; but railroads were ordered to pay one-third of the cost in accordance with their admissions of liability, even though they were not otherwise shown to be responsible for the required reconstruction. *Re Kansas City, Case No. 13,068, August 27, 1956.*

Protest Rejected without Hearing. The United States court of appeals held that a protest filed by a broadcasting station against a Federal Communications Commission order granting another station a renewal of its broadcasting license could be rejected without hearing only if it was clear from the face thereof, taking all of the protestant's allegations as true, that there was no real merit in the protestant's position or a substantial possibility that a hearing would reveal merit. *Federal Broadcasting System, Inc. v. Federal Communications Commission, 231 F2d 246.*

Hearing on Apportionment of Costs. A statute which provided for a public hearing on a complaint alleging that a railroad crossing was dangerous to life and property, held the Minnesota supreme court, was intended merely to insure that there be a hearing on the question of whether the crossing was dangerous and did not require that there be a hearing on the question of apportionment of costs between a railroad and a city which had agreed that a grade separation bridge should be constructed. *Minneapolis Eastern R. Co. v. City of Minneapolis, 77 NE2d 425.*

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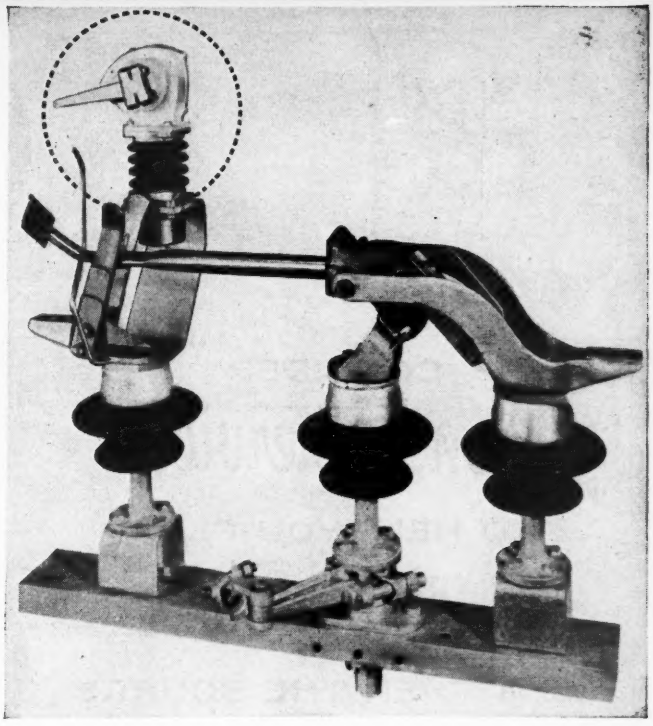

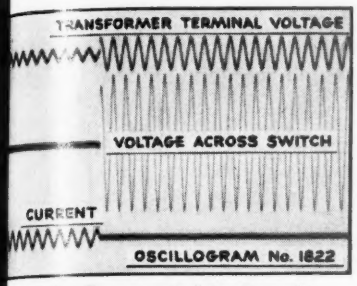

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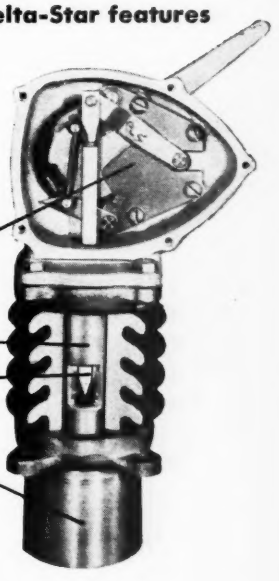

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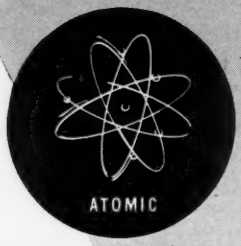

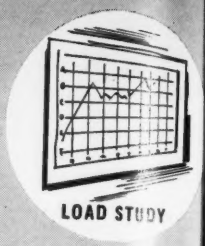

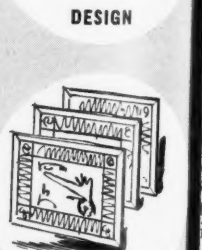

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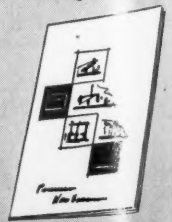


Industrial Progress

Marketing Skills Responsible For Gas Industry Growth

THE dynamic growth and expansion of the gas industry is directly dependent upon the marketing skills of those who make, distribute and sell gas-consuming products, Judson S. Sayre, president of Norge Division, Borg-Warner Corp., Chicago, told the delegates to the recent annual meeting of the American Gas Association. The gas industry, he said, is "vitally interested" in the consumer market and its expansion. "To increase the consumption of the fuel you sell, you should obviously promote the increased use of the equipment or products which burn this fuel," he observed. Another speaker, W. F. Rockwell, Jr., retiring president of the Gas Appliance Manufacturers Association, predicted that the industry which spent $4,000,000,000 from 1952 through 1955 for expansion of transmission and distribution facilities will top that figure by more than fifty per cent in the 1956-59 period, with the expenditure of $6,300,000,000.

These, and other gas industry leaders foresee great growth in the gas industry. J. J. Hedrick, president-elect of the Independent Natural Gas Association, noted that the "growth in volume of natural gas used and in the number of customers has been phenomenal."

1957 Gas Construction Programs

Testimony for the tremendous expansion of the gas industry is to be found in the plans of individual companies throughout the nation. Many of these were included in Public Utilities' Fortnightly special Gas issue of October 25. Others which have become available recently are as follows:

The Dayton Power and Light Company (Dayton, Ohio), expects to install about 125 miles of additional gas mains and will spend about $3,000,000 on new construction in 1957. This is approximately the average of the past two or three years. The company has been extending gas to several new villages and cities, and if it is economically feasible will continue that program in 1957.

Greeley Gas Company (Greeley, Colo.), plans to invest a total of $220,000 in 1957 on construction as follows: Greeley, $125,000; Canon City, $50,000; Craig, $45,000. A total of 665 new customers are expected to be added: Greeley, 400; Canon City, 250; and Craig, 15.

Manufacturers Light and Heat Company (Pittsburgh, Pa.), has received permission from the Federal Power Commission to expand its gas facilities in Western Pennsylvania.

The commission told the concern it could build a new compressor station near Jeanette, Pa. The FPC also said Manufacturers could lease 109 miles of pipe line now operated by Trans-Penn Transit Corp., Bradford, Pa.

Montana-Dakota Utilities Company (Minneapolis, Minn.), estimates that its 1957 construction budget will run in the neighborhood of $7,000,000. The company also has under construction a new 44,000 kw steam generating station at Sidney, Montana. It expects to add 6200 new customers during 1957.

National Fuel Gas Company (New York, N. Y.), estimates that 1957 construction for its subsidiaries will amount to $11,000,000. Approximately 13,000 additional customers will be served.

New Britain Gas Light Company (New Britain, Conn.), reports that proposed construction expenditures for 1957 will be as follows:

Compressor	$ 40,000
Regulators	1,000
Meters	16,000
Meter Installations	3,000
Mains	120,000
Services	40,000
Transportation Equipment	10,000
Tools & Work Equipment	1,000
Miscellaneous	2,000
Total	$233,000

Northern Natural Gas Company (Omaha, Nebr.), reports that construction is underway to increase the system's capacity by 69 million cubic feet per day to 1,195,661,000 cubic feet per day. The $16,500,000 construction program for 1956 will bring 38 million cubic feet per day to presently connected customers, 15 million cubic feet per day to 20 new communities in South Dakota, 4 million cubic feet per day to eight new Iowa communities and 12 million per day to Allied Chemical & Dye Corp. plant near Omaha. In addition, 11.5 million cubic feet of interruptible gas will be delivered daily to St. Paul Ammonia Products Company plant near South St. Paul, Minnesota.

Construction of additional main line facilities has been underway since midsummer when FPC granted a temporary certificate to construct, but not to operate, these facilities. The temporary certificate authorized construction of: 15.5 miles of 24-inch loop line north and south of Hooper, Nebraska, compressor station; six miles of 30-inch loop line north of Bushton, Kansas, compressor station, and 28 miles of 20-inch line from the Ogden, Iowa, compressor station to the Redfield, Iowa, underground storage reservoir. The latter line is for testing the storage area and is not a part of the 1956 capacity expansion. R. H. Fulton & Company was awarded the contracts.

Compressor facilities and contractors included: Hooper, Nebr., 1,320 h.p. unit, H. B. Zachary; Beatrice, Nebr., two 2,000 h.p. units, H. B. Zachary; Sublette, Kans., two 2,000 h.p. units, H. B. Zachary; Hugoton, Kans., 1,320 h.p. unit, Dresser Engineering Co.; Palmyra, Nebr., 2,000

(*Continued on page 26*)

h.p. unit, H. B. Zachary; supercharging six 2,000 h.p. units at Beaver, Okla., Dresser Engineering Co.; Ventura, Iowa, 2,000 h.p. unit, Foor Engineering Co., and Mullinville, Kans., 2,000 h.p. unit, Dresser Engineering Co.

On September 7th FPC granted permission to operate these facilities and to serve 28 new communities. This entails constructing a 163-mile extension of the system from Sioux Falls, S. Dak., to Aberdeen, S. Dak., by R. H. Fulton & Company, (11.7 miles of 16-inch, 81.31 miles of 12-inch and 71 miles of 10-inch); 160.53 miles of branch lines in South Dakota with the contract awarded to Troth Construction Company and 8.75 miles of branch lines in Iowa with the contract going to Underground Constructors, Inc. Completion of branch lines to all Iowa communities and 10 South Dakota towns is expected this fall.

New communities to be served by Northern are:

South Dakota: Aberdeen, Alexandria, Arlington, Brookings, De Smet, Hartford, Huron, Lake Preston, Madison, Mitchell, Montrose, Raymond, Ramona, Salem, Spencer, Turton, Vienna, Volga, Watertown, and Willow Lake.

Iowa: Hudson, Independence, Dyersville, Grundy Center, Kellogg, Manchester, Rockford and Story City.

The addition of these communities boosts the number of communities served by Northern in Iowa to 138 and to 34 in South Dakota. Total communities served by Northern will rise to 377 in the Northern Plain states of Minnesota, Iowa, Nebraska, South Dakota and the state of Kansas.

Pacific Gas & Electric Company (San Francisco, Cal.), plans to build a 200-mile pipeline next year, at a cost of $9,500,000, to bring a large new supply of natural gas into Humboldt County, according to N. R. Sutherland, president.

The proposed pipeline will be built across the mountains from Sacramento Valley, Mr. Sutherland said. More than 20 million feet of natural gas a day will be carried in the 12-inch transmission main, nearly quadrupling deliveries now available from the local Tompkins Hill field. Following approval by the California Public Utilities Commission, the company to start line construction early year and to complete the projec fore the end of November, 1957.

Petersburg & Hopewell Gas C pany (Petersburg, Va.), estim that its 1957 construction budget be as follows:

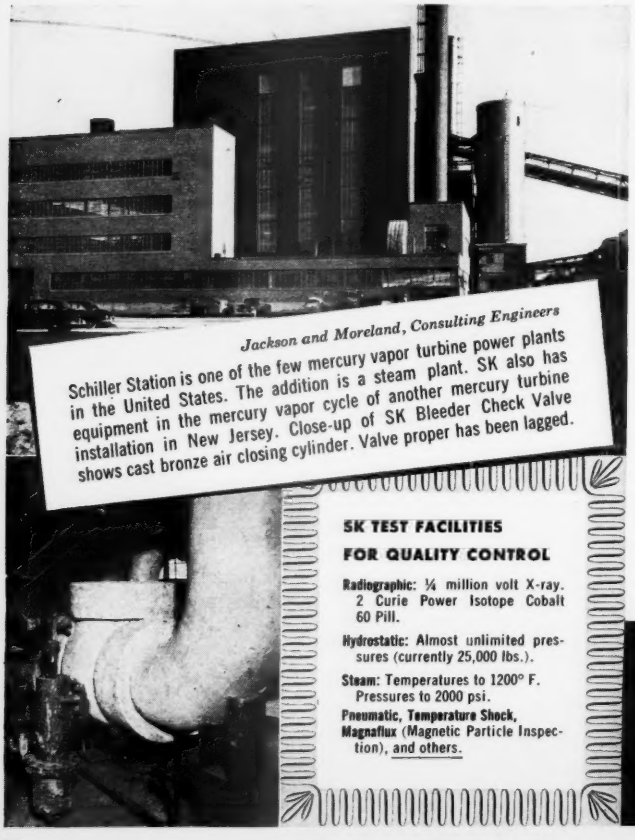
Extension new facilities	$3
System Improvement: Tie-in loop	
Total	$4

It is further estimated that new customers will be connected.

Roanoke Gas Company (noke, Va.), expects to spend app imately $500,000 during 1957 in extensions into new suburban dev ments and industrial areas which serve a potential of approxim 1,000 customers.

San Diego Gas & Electric C pany (San Diego, Cal.), reports final estimates of 1957 construc expenditures in the gas depart are not yet complete. However company expects to spend app

(*Continued on page* 28)



Jackson and Moreland, Consulting Engineers

Schiller Station is one of the few mercury vapor turbine power plants in the United States. The addition is a steam plant. SK also has equipment in the mercury vapor cycle of another mercury turbine installation in New Jersey. Close-up of SK Bleeder Check Valve shows cast bronze air closing cylinder. Valve proper has been lagged.

SK TEST FACILITIES FOR QUALITY CONTROL

Radiographic: ¼ million volt X-ray. 2 Curie Power Isotope Cobalt 60 Pill.

Hydrostatic: Almost unlimited pressures (currently 25,000 lbs.).

Steam: Temperatures to 1200° F. Pressures to 2000 psi.

Pneumatic, Temperature Shock, Magnaflux (Magnetic Particle Inspection), and others.

SK "QUALITY CONTROLLED" VALV GUARD SCHILLER STATION TURBI

The 40,000 KW turbogenerator installed in 195 at Schiller Station of Public Service Company New Hampshire, which operates at 1250 lbs., 950° F and extracts steam to the heaters at fiv stages, is protected by SK air-operated, "Quali Controlled" Bleeder Check Valves.

The bleeder check valves in the extraction li are controlled by an oil-operated pilot valve which closes the bleeder valve when the turbin steam admission valve is tripped due to turbin overspeed or oil pressure failure. Thus, the tur is protected against back flow of steam from extraction lines. In addition, SK level control equipment is used on feedwater heaters to clos the check valves in the bleeder lines to turbine in event of tube failure.

Like those at Schiller Station, all SK Valves are engineered, built, and carefully tested to provide top quality at a fair price. Our Conden Bulletin V-1 tells more about our valve line. Write us for a copy.

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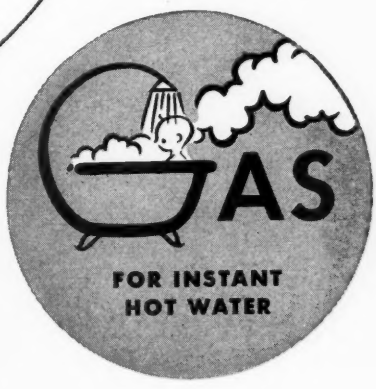


THE COLUMBIA GAS SYSTEM

CHARLESTON GROUP: United Fuel Gas Company, Atlantic Seaboard Corporation, Amere Gas Utilities Company, Virginia Gas Distribution Corporation, Big Marsh Oil Company, Central Kentucky Natural Gas Company; COLUMBUS GROUP: The Ohio Fuel Gas Company, Natural Gas Company of West Virginia; PITTSBURGH GROUP: The Manufacturers Light and Heat Company, Binghamton Gas Works, Cumberland and Allegheny Gas Company, Home Gas Company, The Keystone Gas Company, Inc.; OIL GROUP: The Preston Oil Company.

mately $4,500,000 for new gas facilities during the coming year. More than $1,500,000 of this sum will be used to provide service to an estimated 10,800 new gas customers. The balance of $3,000,000 will be allocated to other projects, such as: $1,555,000 to the installation of 75,000 feet of 20-inch diameter pipe for improvement of the distribution system; $150,000 to the installation of 12,000 feet combination 16-inch and 12-inch pipe for the improvement of the distribution system; $128,000 to the laying of 3,800 feet of underwater line to serve the city of Coronado, and $160,000 to relocation of approximately 10,000 feet of 16-inch pipe to accommodate State highway construction.

Savannah Gas Company (Savannah, Ga.), anticipates the addition of some 2,000 new customers in 1957. Expenditures for construction will amount to over one million dollars.

Southern Indiana Gas and Electric Company (Evansville, Ind.), estimates that it will expend $1,350,000 in 1957 for gas construction expenditures. This estimate is broken down as follows:

(a) Gas storage field projects.	$ 200,000
(b) Miscellaneous gas regulator station — additions and improvements	25,000
(c) New business extensions.	500,000
(d) Miscellaneous additions and improvements to distribution system ...	300,000
(e) Customers' meters and installations	75,000
(f) Purchase of Mt. Vernon, Ind., municipally owned distribution system, including cost of a supply line from the Oliver gas field to said system...	182,000
(g) General equipment—office furniture and fixtures, automotive equipment, tools, etc.	68,000
Total	$1,350,000

Washington Natural Gas Company (Seattle, Wash.), reports that present plans indicate it will spend approximately $3,100,000 for 1957 gross additions to utility plant. Of this amount approximately 60 per cent will be required for mains, services, meters, regulators and meter installations to serve the 8,600 new customers estimated to be attached to its lines during the year.

'57 Dodge Trucks Add Pow Offer Push-Button Drive

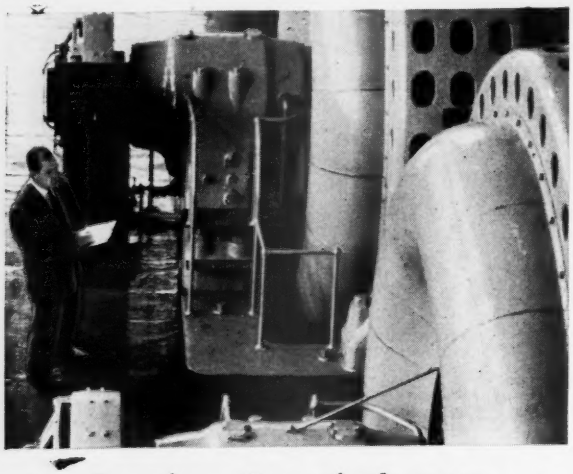
GREATLY increased power and capacities, 3-speed automatic t missions with push-button dr controls, expansion of power ste and power brakes into all model t and new styling are among the n new features of the new 1957 D trucks.

The entirely new "K" Series D truck line announced by M. C. terson, president of Dodg , offers engines with 12 different horsep ratings ranging from 113 to horsepower. This represents an crease of 19 per cent in powe many models.

Mr. Patterson explained that new Dodge truck line covers appr mately 98 per cent of all hauling n and that the right model is avai to haul most economically loads r ing from 4,250 to 46,000 pounds g vehicle weight and up to 65 pounds gross combination weigh

Specific hauling needs of indivi truck owners are met by a variet

(*Continued on page* 30)



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An American Appraisal provides all needed facts when the trustee must furnish an authoritative certificate of value, or verify the existence and condition of all assets.

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More for your Money in
MORYSVILLE

New Line Construction Body for single or dual wheel chassis from ¾ to 2 tons. Length from 8' to 14' (CA's from 48" to 120"). Sliding roof for derrick; ample stowage space inside and out. Many plus features at no extra cost.

- 14 and 16 ga. Body Steel (14 ga. throughout for models rated 1 ton up—19 ga. doors).
- ⅛" Diamond Floor Plate.
- 5" Structural Channel Understructure.
- Electric Welded throughout.
- Telescoping Roof with weather tight, easy sliding action.
- One piece Smooth Welded Drawers and Compartments.
- Vertical or Horizontal Flush Doors with recessed, spring loaded latches at no extra charge.
- Concealed metal Winch Box.
- Curbside Access to tools and equipment used most frequently.
- Vertical Compartments for climbers, lines and linemen's tools.
- Large, inside ventilated, Rubber Goods Compartment.
- Two piece Front Window in cre compartment.
- Bit and Chisel Drawer; Trough f Drills, Tamps, Rods, etc.
- Fendix Undercoating at no extra charge.

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HALL DERRICKS

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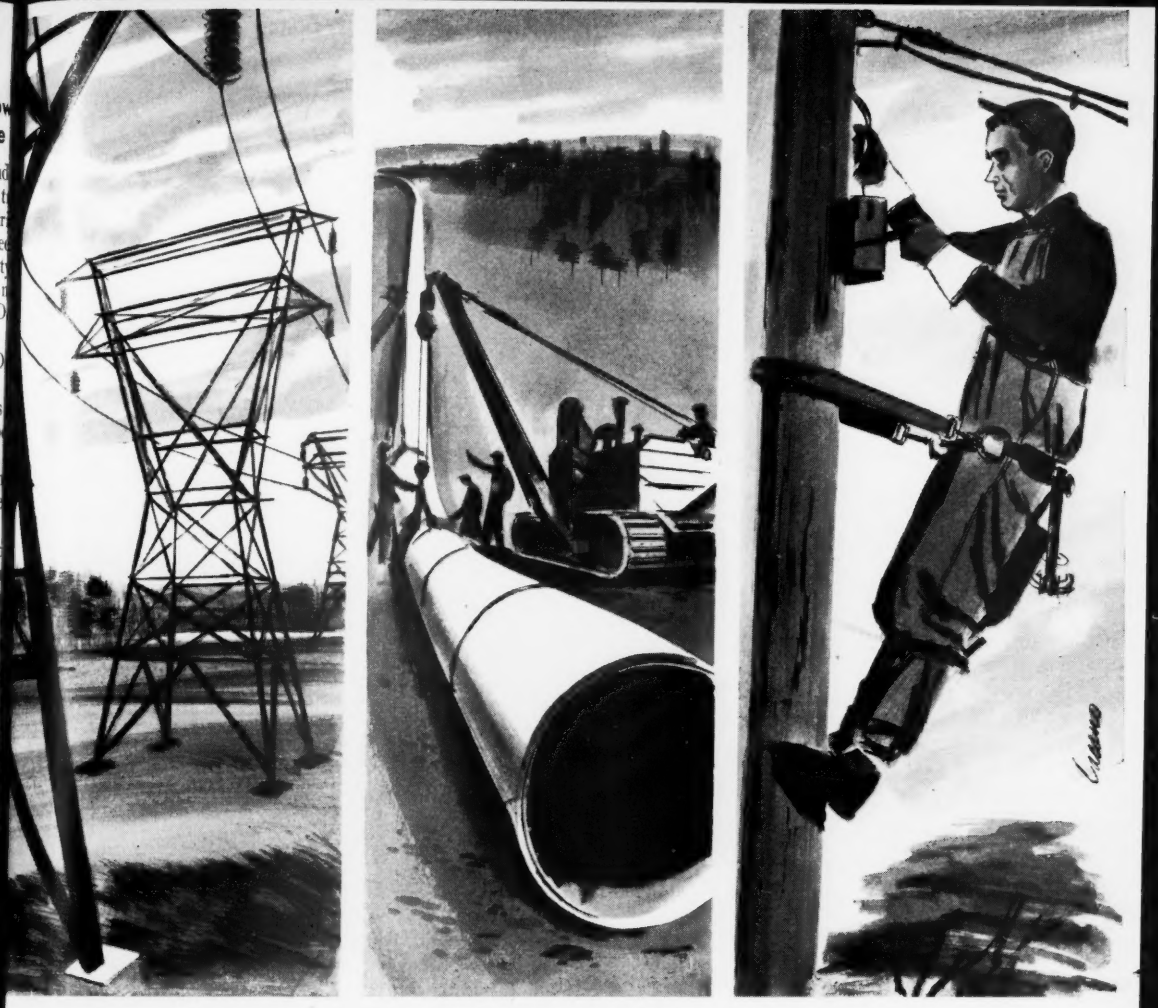

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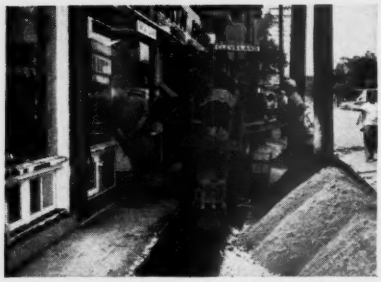
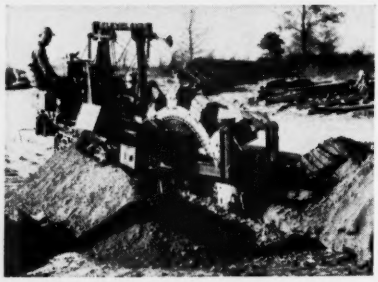
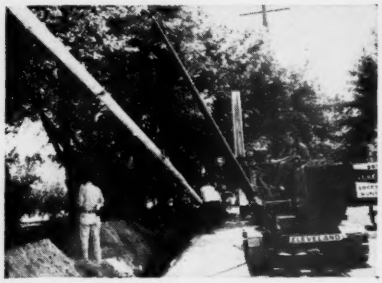




Mains · Extensions · Services



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INDUSTRIAL PROGRESS
(*Continued*)

axles, transmissions, springs, fra and other components. Many feat which improve driver comfort an crease economy, dependability, safety also are built into the Dodge trucks.

Since approximately 65 per cen the 10,500,000 trucks in use in United States are in the low-ton classification of 9,000 pounds G.V and under, special attention was to that huge market in designing new Dodge trucks.

Dodge trucks in that low-tonn classification offer for 1957 a horsepower 6-cylinder engine o 204-horsepower V-8 engine. The c parable 6-cylinder engine in 1956 115 horsepower while the V-8 en was 172 horsepower.

The low-tonnage models are offe in pick-ups, panels, and stakes maximum gross vehicle weight rat ranging from 5,100 to 8,800 pou

The Dodge 4-wheel-drive Pow Wagon, which has been widely u in public utilities and industry s it was introduced in 1946, has a brother" among the new 1957 Do trucks.

The new and larger 4-wheel-d truck has 18,000 pounds G.V.W. is offered with a choice of 197-ho power V-8 engine or 130-horsepo 6-cylinder engine. Horsepower of smaller 4-wheel-drive Power-Wa has been increased to 113. Its ma mum G.V.W. is 9,500 pounds.

Cab-over-engine models ranging to 201 horsepower with 22,500 pou maximum G.V.W. and 45,000 pou G.C.W.; six-wheel models ranging to 232 horsepower with 46,000 pou maximum G.V.W. and 65,000 pou G.C.W.; forward-control chassis school bus chassis complete the 1957 Dodge truck line.

Despite increases in compress ratios, horsepower, and torque, new Dodge trucks are designed to erate on regular grades of gasoli This saves from 35 cents to 60 ce on each tank of gasoline.

Improvements in the 1957 tru are the greatest of any new mo during the 40 years that Dodge been building trucks, Mr. Patters pointed out.

The push-button driving contr are offered for the first time on truck. They are offered on all lo tonnage and forward-control mod

An economical overdrive transm sion is available on the low-tonna 100 models (5,100 pounds maxim G.V.W.) to save fuel and cut oper ing costs.

Two-speed rear axles in a w

ice are available on 400 (15,000 nds maximum G.V.W.) through (46,000 pounds maximum .W.) models and on all cab-over-ine models to assure the best ratio any load or road. Three-speed iliary transmissions are available all tandem and conventional high-age models for improved per-mance under heavy loads and in the-road operations.

ngineers Told How Digital Computers Can Aid Utilities

E growing importance of digital nputers in electric utilities was em-sized recently during two sym-iums on system engineering at the eral meeting of the American Insti-e of Electrical Engineers, Chicago. n five papers by leaders in the nputer field, it was stressed that h devices can speed up calculations ich are routine in system engineer-, and can make possible the solu-n of other problems that have been lected because of their complexity. Some of those taking part in the sessions also pointed out the essity for training personnel in gramming and operation of com-ers.

A digital computer was defined by A. Peterson, of the University of sconsin, as a tool which is a worthy l to better understanding of in-asingly complex physical problems l relationships. He warned, how-r, in his paper, "What is a Digital nputer?" that the computer has wbacks, among them inability to nk up problems.

F. J. Maginniss, General Electric mpany, in a paper, "Digital Com-ers Can Aid Utilities," pointed out t vast new problems which never uld have been attacked, can now solved by digital computers. Many these are problems that would not nomically justify human computa-n. A human being can solve any blem a computer can, but at a ch slower rate, he said. He urged ities to start training personnel to dy ways computers can be used to ve day-to-day problems, so that hen the time comes that you think ur organization can justify a com-er for this sort of use, you will ve already built up a backlog of blems whose solution by digital nputers is familiar to you."

In a paper, "Elementary Problem eparation Flow Diagrams, Etc.," L. Harder, of Westinghouse Elec-tric Corp., said that if experience in system engineering parallels that of product engineering, "you will end up with a very extensive use of com-puters."

E. R. Moore, Detroit Edison Company, outlined his company's experience with the organization and personnel in the use of computers. The principal result in using computers "is not to reduce engineering manpower, but rather to use engineers more effectively in achieving more economical operation and expansion," he said.

Other papers presented during the two sessions were "Principles of Programming," by J. B. Ward, Purdue University; "Electro-Mechanical Accounting Machines for Power Engineering," by L. A. Dunstan, Digi-netics, Inc.; "Use of Digital Computers in Co-ordination of System Generation," by P. L. Dandeno, Hydro-Electric Power Commission of Canada, and "Digital Calculations on Short-Circuit Currents in Large Complex-Impedence Networks," by L. W. Coombe, Detroit Edison Co., and D. G. Lewis, General Electric Co.

(*Continued on Page 32*)

This advertisement is neither an offer to sell nor a solicitation of offers to buy any of these securities. The offering is made only by the Prospectus.

NEW ISSUE

October 17, 1956

400,000 Shares

Commonwealth Edison Company

4.64% Cumulative Preferred Stock

(Par Value $100 Per Share)

Price $100 per share

plus accrued dividends from November 1, 1956

Copies of the Prospectus may be obtained from any of the several underwriters, including the undersigned, only in States in which such underwriters are qualified to act as dealers in securities and in which the Prospectus may legally be distributed.

The First Boston Corporation **Glore, Forgan & Co.**

Elyria Telephone Continues Expansion Program

THE exchange and office building of The Elyria Telephone Company of Elyria, Ohio, is nearing completion and it is expected that the administrative and clerical offices will be moved before the end of the year. The exchange is scheduled to be placed in service in the summer of 1957. The building and new system represent an expenditure of more than $1,500,000.

An additional $95,000 is being spent to improve existing sub exchanges, while a contract for toll dialing equipment, totaling $175,000, has been let. It is expected that direct distance dialing will be inaugurated in the spring of 1958.

A total of $600,000 has been allotted for the construction of outside plant in the next twelve months.

Ohio Edison to Double Capacity Of Stratton Plant

WALTER H. SAMMIS, president of Ohio Edison Company announced recently that the company will double the size of the new steam-electric power plant now under construction at Stratton, Ohio, on the Ohio river. Total capacity will be 680,000 kilowatts, with the addition of two 170,000 kilowatt units to the two of similar size originally projected when ground was broken for the new plant last May.

The expanded plans will increase the total cost from $62,000,000 to approximately $116,000,000. The first unit is scheduled for operation late in 1958. The second unit will go into service in late 1959, with the other two following in 1960 and 1961.

"Business growth in Ohio Edison's service area indicates that additional generating capacity will be needed earlier than originally expected," said Mr. Sammis. "The Stratton plant will be the largest power producer on the Edison system."

This plant, together with a 90,000 kilowatt addition at the Edgewater plant near Lorain, Ohio, and another 90,000 kilowatt unit at the New Castle plant of Pennsylvania Power Company, subsidiary of Ohio Edison, and scheduled for operation in 1957 and 1958 respectively, will add 860,000 kilowatts to the system. This will represent an increase of approximately 50 per cent above the present system capability of 1,700,000 kilowatts.

The Stratton plant, when in full operation, will consume approximately 6,700 tons of coal on a 24-hour basis. Upwards of 1,000,000 tons of coal will be stockpiled at this plant.

Philadelphia Water Department Seeks Chief Accountant

THE Water Department of the City of Philadelphia is looking for a Chief Utility Accountant, someone who has a utility accounting background and is familiar with accounting procedures analysis and large scale cost accounting, and who has a minimum of seven years of experience of which four years should be in a supervisory capacity. This man will report directly to the Departmental Administrative Services Officer and will have a challenging opportunity in directing a large scale accounting operation. The salary for this position will be up to $11,200. A resume should be sent to the Personnel Officer, Philadelphia Water Department, Room 1120 City Hall Annex, Philadelphia, Pa.

General Electric Building 9,000 KVA Mobile Substation

A TRAILER-MOUNTED electric power substation big enough to supply the average needs of a community of 22,000 persons is being built by the General Electric Company for the Puget Sound Power and Light Company, Seattle, Wash.

The 9,000 kilovolt-ampere unit is the highest rated mobile substation ever built by the company's Power Transformer Department. Largest previous rating built was 7,500 kva.

The Washington utility will use the rolling substation to maintain service while its permanent substations are shut down for maintenance. It will also be available for use in emergencies. It will be based at the firm's Shuffleton plant at Renton, Wash.

The unit can be connected to transmission lines carrying either 66,000 or 55,000 volts which it can "step down" to any of four different lower voltages for distribution to consumers: 13,090, 7,560, 4,360 and 2,520 volts. All necessary switchgear, lightning arresters and control equipment are mounted with the transformer on the trailer body. The complete equipment conforms to Washington state highway regulations regarding weights and dimensions. The trailer, with its tractor-truck, is 47 feet long, 8 feet wide, and 14 feet high, and weighs 35 tons.

Central Hudson Gas & Ele Plans 138,000 KW Unit A Danskammer Point Station

A THIRD electric generating uni the Danskammer point steam sta is being planned for operation in fall of 1959, it was disclosed rece by Ernest R. Acker, president of Central Hudson Gas and Electric C poration.

The new unit will cost appro mately $22,000,000. It will have a capacity of 138,000 kilowatts, rai the station's total net capacity to proximately 278,000 kilowatts. Danskammer station is located a miles north of Newburgh, N. Y. the west bank of the Hudson Ri

Central Hudson supplies nat gas and electricity to a 2,500 sq mile area between Westchester Co ty and Albany with a population excess of 300,000. It includes cities of Poughkeepsie, Beacon, N burgh and Kingston and is regar as one of the fastest-growing area New York State.

The firm of Burns & Roe, Inc. been engaged to perform the en neering work and to supervise construction of the new unit, acco ing to Mr. Acker. Burns & Roe p formed similar services for the existing Danskammer units. Cen Hudson intends to purchase a turbi generator from the General Elec Company for delivery in the last qu ter of 1958, and has given Comb tion Engineering, Inc. a letter of tent to purchase a boiler for deliv in the first quarter of 1958.

The Belmont Iron Works of Ph delphia has been awarded the contr for supplying the structural steel quirements for the new unit, and a ter of intent has been sent to the F ter Wheeler Corporation covering purchase of a condenser and rela auxiliaries.

Council of State Chambers Executive Now in Private Practice

ANNOUNCEMENT was made cently that Thomas Ward Miles, p lic relations adviser to the Council State Chambers of Commerce, is tablishing an office in the Natio Press Building, Washington, D. for the private practice of public re tions. He will continue to serve Council of State Chambers of Co merce. He helped set up the Counci Washington research office early

8. Prior to that time he was on the f of the Newark (N. J.) Evening ws and the Elizabeth (N. J.) Jour- Mr. Miles is a member of the ional Press Club, the American blic Relations Association, Ameri- Chamber of Commerce Executives the Princeton Club of Wash- on.

iana & Michigan Elec. To Build New $58,000,000 Plant

NEW $58,000,000 electric power nt, to house the world's largest gen- ting unit, will be built by the In- na & Michigan Electric Company the Wabash river south of Terre ute, Ind., according to a recent an- ncement.

The power plant will be served by ew coal mine to be developed near- by Ayrshire Collieries Corporation, Indianapolis. The mine and power ion will be connected by a private -mile railroad to be built, owned and rated by Ayrshire. It is estimated t the cost of the new mine and rail- d will be in excess of $4,000,000.

The generating unit will have a gen- ting capacity of 450,000 kilowatts 3 per cent larger than any unit op- ting today. It is the first of two nned on the seven-state American s and Electric Company System, which I. & M. is a major part. Lo- ion of the second unit elsewhere on AGE System is still under study d is expected to be announced later the year.

Philip Sporn, president of AGE and & M., said that construction of the wer plant would be started in the y near future and that completion scheduled for late in 1958. Provi- n has been made in its design for ntual expansion to 900,000 kw.

The plant will be tied in to the I. & system via a new 330,000-volt nsmission line. In turn, the I. & M. stem is interconnected and inte- ated with the balance of the seven- te AGE System.

R-R Booklet

OW industry and business can de- ease operating costs and achieve eater profits is told in a new eight- ge illustrated booklet published by emington Rand. Entitled "These hite Elephants are Made of Pa- r," the publication outlines various ethods of improving management d records control.

The booklet points out that the ef- ficient records-producing equipment of modern business—electric typewriters making up to 15 copies, duplicating equipment capable of producing 150 copies per minute, and tabulators that print up to 100 lines per minute—actually is creating a white elephant whose very enormity can weight down an entire organization. This condition is indicated by increasing personnel and space costs, lost executive time, and unnecessary equipment expenditures.

According to the booklet, the first step in establishing records control and cutting down the size of this white elephant is an inventory and appraisal of all existing records, and the setting up of a Retention Schedule. This is followed by a detailed analysis and reorganization of filing systems and procedures and the selection of proper equipment for both administrative and operating personnel.

Copies of this booklet, BSD 45, are available from Remington Rand sales offices in all principal cities or by writing to Remington Rand Division, Sperry Rand Corp., 315 Fourth Avenue, New York 10, New York.

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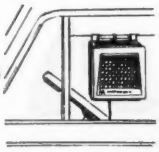

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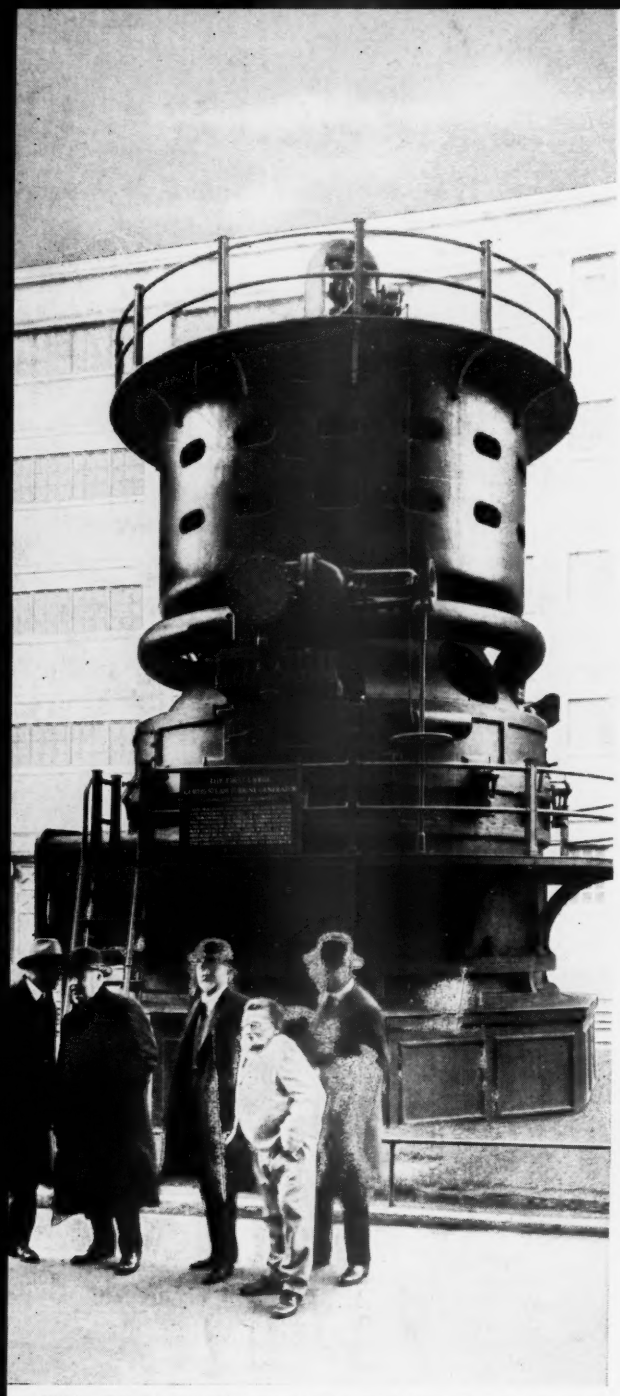
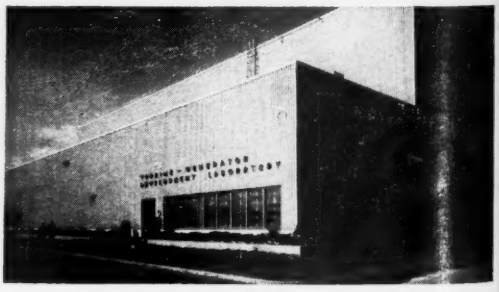


William L. R. Emmett and Thomas A. Edison (left) and Charles P. Steinmetz (light suit), early pioneers in the electric industry, are pictured before the world's first large steam turbine-generator. This "Monument to Courage" was recently rededicated in ceremonies held in Schenectady, N. Y.



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